



Rijksdienst voor Ondernemend  
Nederland

# *Nederland*

## *De industriële eigendom*

## Inleiding

### Hoofdblad

Het Blad de Industriële Eigendom verschijnt op de derde werkdag van een week. Indien Octrooicentrum Nederland op deze dag is gesloten, wordt de verschijningsdag van het blad verschoven naar de eerstvolgende werkdag, waarop Octrooicentrum Nederland is geopend. Het blad verschijnt alleen in elektronische vorm. Elk nummer van het blad bestaat uit 14 rubrieken.

### Bijblad

Verschijnt vier keer per jaar (januari, april, juli, oktober) in elektronische vorm via [www.rvo.nl/octrooien](http://www.rvo.nl/octrooien). Het Bijblad bevat officiële mededelingen en andere wetenswaardigheden waarmee Octrooicentrum Nederland en zijn klanten te maken hebben.

### Abonnementsprijzen per (kalender)jaar:

Hoofdblad en Bijblad: verschijnt gratis in elektronische vorm op de website van Octrooicentrum Nederland.

#### *Bezoekadres:* **Octrooicentrum Nederland**

Prinses Beatrixlaan 2

2595 AL Den Haag

Postadres

Postbus 10366

2501 HJ Den Haag

Telefoon: 088-0426656

Bankrekeningnummer:

Voor taksen en depotrekeningen:

ING 0705001296

Iban: NL41INGB070500129

BIC: INGBNL2A

## Introduction

### Patent Bulletin

The Patent Bulletin appears on the 3rd working day of each week. If the Netherlands Patent Office is closed to the public on the above mentioned day, the date of issue of the Bulletin is the first working day thereafter, on which the Office is open. Each issue of the Bulletin consists of 14 headings.

### Official Journal

Appears four times a year (January, April, July, October) in electronic form on the [www.rvo.nl/octrooien](http://www.rvo.nl/octrooien). The Official Journal contains announcements and other things worth knowing for the benefit of the Netherlands Patent Office and its customers.

### Subscription rates per calendar year:

Patent Bulletin and Official Journal: free of charge in electronic form on the website of the Netherlands Patent Office.

#### *Visiting address:* **Netherlands Patent Office**

Prinses Beatrixlaan 2

2595 AL Den Haag

Postadress

Post Office Box: 10366

2501 HJ Den Haag

Telephone: +31(0)88 0426656

Account:

Fees, deposit accounts:

ING 0705001296

Iban: NL41INGB070500129

BIC: INGBNL2A

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| <b>Rubriek NP2</b><br>Bevat gegevens betreffende ingeschreven en verleende octrooien op grond van de Octrooiwet 1995.                                                                  | 10 <b>Heading NP2</b><br>Contains data concerning Netherlands patents which have been entered in the patent register under the Patents Act 1995.                                         | 10          |
| <b>Rubriek NP3</b><br>Bevat gegevens betreffende Nederlandse octrooien na gedeeltelijke afstand conform artikel 63 van de Octrooiwet 1995.                                             | 12 <b>Heading NP3</b><br>Contains data concerning Netherlands patents after partial renunciation confirm Article 63 of the Patents Act 1995.                                             | 12          |
| <b>Rubriek EP1</b><br>Bevat gegevens betreffende vertaalde conclusies van Europese octrooiaanvragen.                                                                                   | 13 <b>Heading EP1</b><br>Contains data concerning translations of the conclusions of European patent applications.                                                                       | 13          |
| <b>Rubriek EP2</b><br>Bevat gegevens betreffende voor Nederland verleende Europese octrooien.                                                                                          | 14 <b>Heading EP2</b><br>Contains data concerning European patents granted for The Netherlands.                                                                                          | 14          |
| <b>Rubriek EP3</b><br>Bevat gegevens betreffende voor Nederland verleende Europese octrooien waarvoor een vertaling is ingediend conform artikel 52 lid 1 of 6 van de Octrooiwet 1995. | 397 <b>Heading EP3</b><br>Contains data concerning European patents granted for The Netherlands in which a translation was filed confirm Article 52 par. 1 or 6 of the Patents Act 1995. | 397         |
| <b>Rubriek EP4</b><br>Bevat gegevens betreffende voor Nederland verleende gewijzigde Europese octrooien.                                                                               | 465 <b>Heading EP4</b><br>Contains data concerning European patents granted in amended form for the Netherlands.                                                                         | 465         |
| <b>Rubriek EP5</b><br>Bevat gegevens betreffende voor Nederland verleende gewijzigde                                                                                                   | 467 <b>Heading EP5</b><br>Contains data concerning European patents granted in amended form for                                                                                          | 467         |

Europese octrooien waarvoor een gewijzigde vertaling is ingediend.

The Netherlands in which an amended translation was filed.

**Rubriek SPC**

Bevat gegevens betreffende ingeschreven en verleende certificaten

**468Heading SPC**

Contains data concerning applications for- or granted Supplementary Protection Certificates.

468

**Rubriek VB1**

Bevat gegevens betreffende rechten waarvoor een verzoek of bezwaarschrift is ingediend conform de Octrooiwet 1995.

**469Heading VB1**

Contains data concerning requests and notices of opposition under the General administrative law.

469

**Rubriek VB2**

Bevat gegevens betreffende rechten waarin een beslissing is genomen of waarvoor een nieuwheidsrapport is uitgegaan op een verzoek- of bezwaarschrift conform de Octrooiwet 1995.

**472Heading VB2**

Contains data concerning requests and notices of opposition under the General administrative law in respect of which a decision has been taken or in respect for which a report has been made.

472

**Rubriek MED**

Bevat gegevens betreffende overige mededelingen.

**474Heading MED**

Contains data concerning other communications.

474

**Rubriek VRV**

Bevat gegevens betreffende verval of nietigverklaring.

**475Heading VRV**

Contains data concerning lapse or annulment.

475

**Rubriek VRB**

Bevat gegevens betreffende verbeteringen op eerdere publicaties.

**478Heading VRB**

Contains data concerning corrections on earlier publications.

478

**Rubriek CO**

Bevat gegevens betreffende wijzigingen in het octrooiregister.

**479Heading CO**

Contains data concerning changes in the Netherland patent register.

479

**Rubriek TVH**

Bevat gegevens betreffende topografieën van halfgeleiderproducten.

**483Heading TVH**

Contains data concerning depots of original topographies of semi-conductor products.

483

## Overzicht van Inid codes

### INID CODES

Inid codes worden gebruikt op de voorpagina van octrooigeschriften en in octrooibulletins. Ze dienen om de verschillende bibliografische gegevens te kunnen begrijpen zonder kennis te hebben van de taal. INID is een acronym van Internationally agreed Numbers for Identification of Data. De definities van INID codes wordt gegeven in de WIPO standaard ST. 9.

### INID CODES

"INID" Codes are used on the front pages of patent documents and in official gazettes to identify various bibliographic data items without knowledge of the language used and the industrial property laws applied. "INID" is an acronym for "Internationally agreed Numbers for the Identification of Data". The INID Codes are usually given in parenthesis adjacent to the appropriate bibliographic data item. The definitions of the INID Codes are given in WIPO Standard ST. 9 (as of November 1998) and are listed below:

|                                                                           |                                                                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (11) Octrooinummer                                                        | (11) Patent number                                                                                                                                                                                                                                                |
| (13) Soort document volgens WIPO standaard 16                             | (13) Kind of document code according to WIPO standard ST.16                                                                                                                                                                                                       |
| (15) Correctie informatie                                                 | (15) Patent correction information                                                                                                                                                                                                                                |
| (21) Octrooiaanvraagnummer                                                | (21) Application number                                                                                                                                                                                                                                           |
| (22) Datum van indiening                                                  | (22) Date(s) of filing application(s)                                                                                                                                                                                                                             |
| (23) Datum tentoonstelling                                                | (23) Date of exhibition                                                                                                                                                                                                                                           |
| (25) Taal van indiening                                                   | (25) Language in which the published application was originally filed                                                                                                                                                                                             |
| (26) Taal waarin de aanvraag is gepubliceerd                              | (26) Language in which the application is published                                                                                                                                                                                                               |
| (30) Voorrangsgegevens                                                    | (30) Priority Data                                                                                                                                                                                                                                                |
| (31) Nummer voorrang                                                      | (31) Number(s) assigned to priority application(s)                                                                                                                                                                                                                |
| (32) Datum voorrang                                                       | (32) Date(s) of filling of priority application(s)                                                                                                                                                                                                                |
| (33) Land van herkomst voorrang                                           | (33) WIPO Standard ST.3 Code indentifying the national patent office allotting the priority application number or the organization allotting the regional priority application number: for international applications filed under the PCT, the code "WO" is used. |
| (34) Oorspronkelijk land van indiening                                    | (34) For priority fillings under the regional or international arrangements, the WIPO Standard ST.3 Code indentifying at least one country party to the Paris Union for which the regional or international application was made.                                 |
| (40) Datum van inschrijving                                               | (40) Date(s) of making available to the public                                                                                                                                                                                                                    |
| (41) Datum van inschrijving van een octrooiaanvraag                       | (41) Date of making available to the public by viewing, or copying on request an unexamined patent document, on which no grant has taken place on or before the said date.                                                                                        |
| (42) Datum van inschrijving van een onderzochte aanvraag (openbaarmaking) | (42) Date of making available to the public by viewing, or copying on request an examined patent document, on which no grant has taken place on or before the said date.                                                                                          |
| (43) Datum waarop de aanvraag ter inzage is gelegd                        | (43) Date of publication by printing or similar process of anexamined document on which no grant has taken place on or before said date                                                                                                                           |

|                                                                                             |                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (44) Datum van openbaarmaking                                                               | (44) Date of publication by printing or similar process of an examined document on which no grant has taken place on or before said date                                                            |
| (45) Datum van kracht worden van een Europees octrooi in Nederland                          | (45) Date of publication by printing or similar process of a document on which no grant has taken place on or before said date                                                                      |
| (46) Inschrijvingsdatum conclusies                                                          | (46) Date of publication by printing or similar process of the claim(s) only of a document                                                                                                          |
| (47) Verleningsdatum octrooi                                                                | (47) Date from which the patent takes effect                                                                                                                                                        |
| (48) Datum waarop een verbetering van een octrooi is uitgegeven                             | (48) Date of issuance of a corrected patent document                                                                                                                                                |
| (51) Internationale Octrooiclassificatie                                                    | (51) International Patent Classification                                                                                                                                                            |
| (54) Korte aanduiding                                                                       | (54) Title of the invention                                                                                                                                                                         |
| (62) Nummer moeder aanvraag                                                                 | (62) Number and, if possible, filing date of the earlier application from which the present document has been divided out                                                                           |
| (68) Nummer basis octrooi                                                                   | (68) Number of the basic patent                                                                                                                                                                     |
| (71) Naam aanvrager(s)                                                                      | (71) Name(s) of the applicant(s)                                                                                                                                                                    |
| (72) Naam uitvinder(s)                                                                      | (72) Name(s) of the inventor(s) if known to be such                                                                                                                                                 |
| (73) Naam octrooihouder(s)                                                                  | (73) Name(s) of grantee(s)                                                                                                                                                                          |
| (74) Naam gemachtigde                                                                       | (74) Name(s) of the attorney(s) or agent(s)                                                                                                                                                         |
| (75) Naam van uitvinders die tevens aanvrager zijn                                          | (75) Name(s) of inventor(s) who is (are) also application(s)                                                                                                                                        |
| (81) Aangewezen landen volgens de PCT                                                       | (81) Designated States(s) according to the PCT                                                                                                                                                      |
| (83) Informatie over micro organismen                                                       | (83) Information concerning the deposit of microorganisms                                                                                                                                           |
| (84) Aangewezen landen bij regionale octrooien                                              | (84) Designated Contracting States under regional patent conventions                                                                                                                                |
| (86) Nummer van omgezette aanvraag                                                          | (86) Application number of a PCT-application or number of European patent which is converted into a national application                                                                            |
| (87) Datum en nummer van een PCT aanvraag                                                   | (87) Publication date and number of a PCT application                                                                                                                                               |
| (92) Certificaten: nummer en datum van de eerste nationale vergunning voor een geneesmiddel | (92) For an SPC, number and date of the first national authorization to place the product on the market as a medicinal product                                                                      |
| (93) Datum en nummer van de eerste EU vergunning voor een geneesmiddel                      | (93) For an SPC, number and date and where applicable, country of origin, of the first authorization to place the product on the market as a medicinal product within a regional economic community |
| (94) Expiratiedatum voor een topografie                                                     | (94) Calculated date of expiry of the topography                                                                                                                                                    |
| (95) Certificaten: naam van het product                                                     | (95) Name of the product protected by the basic patent and in respect of which the SPC has been applied for or granted                                                                              |

# Rubrieken/Headings

## NP1

**Nederlandse octrooiaanvragen die zijn ingeschreven op grond van de Octrooiwet 1995.**  
**Contains data concerning Netherlands patent applications which have been entered in the patent register under the Patents Act 1995.**

|                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) A01D 45/26<br>A01D 57/01<br>(21) 2024276<br>(22) 21.11.2019<br>(54) Oogstinrichting voor groenteplanten<br>(71) Tumoba Vegetable Harvesters B.V.<br>(74) ir. A. Ferguson<br>(72) Hendrik Willem Molenaar                                                                        | FISHES IN RIVER BENDS AND RIVER<br>BEACHES IN UPPER REACHES OF<br>YANGTZE RIVER<br>(71) SHANGHAI OCEAN UNIVERSITY<br>(74) ir. H.Th. van den Heuvel c.s.<br>(72) Kai Wang<br>Xunmeng Li<br>Ling Chen<br>Shouyu Zhang<br>Zhenhua Wang                                                                                                                                                                                                                                                    | (33) China<br>(51) A22B 5/16<br>A22C 21/00<br>(21) 2024085<br>(22) 23.10.2019<br>(54) Deskinning apparatus and method for<br>deskinning a poultry leg or part of a<br>poultry leg<br>(71) Meyn Food Processing Technology B.V.<br>(74) mr. ir. J. van Breda c.s.<br>(72) Dirk Hermen van der Waal<br>Peter Martin Andeweg                                                                                                                                                                                                                                                                          |
| (51) A01D 45/26<br>A01D 57/01<br>(21) 2028192<br>(22) 11.05.2021<br>(54) Oogstinrichting voor groenteplanten<br>(62) 2024276<br>(71) Tumoba Vegetable Harvesters B.V.<br>(74) ir. A. Ferguson<br>(72) Hendrik Willem Molenaar                                                        | (41) 07.07.2021<br>(51) A01K 69/06<br>A01M 23/02<br>(21) 2027926<br>(22) 07.04.2021<br>(54) TRAPPING DEVICE FOR AN EGG<br>MASS OF A GOLDEN APPLE SNAIL<br>(71) Nanjing Institute of Environmental<br>Sciences, Ministry of Ecology and<br>Environment of the People's Republic of<br>China<br>(74) ir. W.J.J.M. Kempes<br>(72) Yaping Hu<br>Xudong Li<br>Xiaomin Ge<br>Xu Zhou<br>Hui Ding<br>Shuifei Chen<br>Wenwen Zhang<br>Yanqing Wu<br>Fan Yong<br>Le Wang<br>Jun Wu<br>Weibo Guo | (41) 13.07.2021<br>(51) A45D 29/05<br>(21) 2024086<br>(22) 23.10.2019<br>(54) Nail polish file<br>(71) SWIVA<br>(74) mr. ir. J. van Breda c.s.<br>(72) Marinus Johannes Maria Swinkels<br>(41) 13.07.2021<br>(51) A61B 46/00<br>A61M 13/00<br>(21) 2026340<br>(22) 25.08.2020<br>(54) Integrated intracavity gas circulation<br>treatment device for laparoscopic surgery<br>(71) SIMAI CO., LTD.<br>(74) drs. C.M.A. Quintelier<br>(72) Min Lin<br>(31) 201911034517.1<br>(32) 29.10.2019<br>(33) China                                                                                           |
| (51) A01K 1/01<br>A01K 1/015<br>(21) 2024094<br>(22) 24.10.2019<br>(54) A SYSTEM FOR GATHERING<br>EXCRETA OF PRODUCTION ANIMALS<br>(71) IM-ACES B.V.<br>(74) ir. P.J.P. Janssen<br>(72) Franciscus Johannes Josephus van<br>Poppel<br>(41) 13.07.2021                                | (31) 202010266986.2<br>(32) 07.04.2020<br>(33) China<br>(51) A01K 73/12<br>G01S 5/20<br>(21) 2027871<br>(22) 31.03.2021<br>(54) AUXILIARY DECISION-MAKING<br>SYSTEM FOR TUNA PURSE SEINE<br>PRECISE FISHING AND METHOD<br>THEREOF<br>(71) SHANGHAI OCEAN UNIVERSITY<br>(74) ir. W.J.J.M. Kempes<br>(72) Jianfeng Tong<br>Jin Zhang<br>Xuefang Wang<br>Cheng Zhou<br>Rong Wan<br>Weidong Zhu<br>Zhenhong Zhu<br>Wang Xi                                                                 | (51) B05B 12/24<br>E06B 1/70<br>(21) 2024089<br>(22) 23.10.2019<br>(54) KOZIJN EN WERKWIJZE VOOR HET<br>VERVAARDIGEN DAARVAN<br>(71) Hendriks Holding BV<br>(74) dr. T. Hubregtse<br>(72) Patrick Herman Marie Hendriks<br>(41) 13.07.2021<br>(51) B07C 5/34<br>G06K 9/36<br>G06K 19/063<br>(21) 2024079<br>(22) 22.10.2019<br>(54) Method of identifying an item, waste<br>separation and item comprising a dot<br>code<br>(71) FiliMade Holding B.V.<br>(74) ir. J.C. Volmer c.s.<br>(72) Johannes Bernardus Kerver<br>Bjørn-Erik Johan Willem Pieter Hendrik<br>van Dommelen<br>(41) 13.07.2021 |
| (51) A01K 13/00<br>A45D 8/00<br>(21) 2024093<br>(22) 24.10.2019<br>(54) Equine grooming device<br>(71) HES-tec B.V.<br>(74) ir. H.Th. van den Heuvel c.s.<br>(72) Johannes Hubertus Jozef Maria Kelders<br>Erwin Lambertus Leonardus Samuels<br>Frank van Helvert<br>(41) 13.07.2021 | (31) 202010874834.0<br>(32) 27.08.2020                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| (51) A01K 61/70<br>E02B 3/14<br>(21) 2027693<br>(22) 03.03.2021<br>(54) TRIANGULAR-PLATFORM FISH REEF<br>FOR IMPROVING HABITATS OF                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

|                                                                                                                                          |                                                                                                                                                                    |                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| (51) B08B 3/02                                                                                                                           | (41) 13.07.2021                                                                                                                                                    | (72) Teunis Willem van Middendorp                            |
| (21) 2024204                                                                                                                             | (51) B63B 35/03                                                                                                                                                    | (41) 13.07.2021                                              |
| (22) 08.11.2019                                                                                                                          | B65H 49/32                                                                                                                                                         | (51) E21B 33/00                                              |
| (54) Hogedrukreinigingssysteem en werkwijze voor het reinigen van een oppervlak                                                          | B65H 75/42                                                                                                                                                         | (21) 2026573                                                 |
| (71) Meclean Professional Cleaningmachines B.V.                                                                                          | F16L 1/20                                                                                                                                                          | (22) 29.09.2020                                              |
| (74) ir. M. van der Velden                                                                                                               | (21) 2024088                                                                                                                                                       | (54) Running lines through expandable metal sealing elements |
| (72) Cornelis Johan Verhelst                                                                                                             | (22) 23.10.2019                                                                                                                                                    | (71) Halliburton Energy Services, Inc.                       |
| (41) 09.07.2021                                                                                                                          | (54) MARINE PIPELINE INSTALLATIONS                                                                                                                                 | (74) mr.ir. F.N. Ferro                                       |
| (51) B09C 1/08                                                                                                                           | (71) Royal IHC Limited                                                                                                                                             | (72) Stephan Michael Greci                                   |
| C09C 1/50                                                                                                                                | (74) dr. A. Krebs                                                                                                                                                  | Michael Linley Fripp                                         |
| (21) 2027898                                                                                                                             | (72) Michael John Watchorn                                                                                                                                         | Gregory Scott Cunningham                                     |
| (22) 01.04.2021                                                                                                                          | Michael James Smith                                                                                                                                                | Darrel Wayne Adkins                                          |
| (54) GRAPHENE-FERRIC OXIDE MODIFIED BIOCHAR AND METHOD FOR MAKING SAME AS WELL AS USE THEREOF                                            | (41) 13.07.2021                                                                                                                                                    | (31) US16/667,678                                            |
| (71) QINGDAO AGRICULTURAL UNIVERSITY                                                                                                     | (51) C10B 53/02                                                                                                                                                    | PCT/US2019/058904                                            |
| (74) ir. W.J.J.M. Kempes                                                                                                                 | C10B 53/07                                                                                                                                                         | (32) 29.10.2019                                              |
| (72) Fangli Wang                                                                                                                         | (21) 2026522                                                                                                                                                       | 30.10.2019                                                   |
| Haiying Zong                                                                                                                             | (22) 23.09.2020                                                                                                                                                    | (33) United States of America                                |
| (31) 202110164152.5                                                                                                                      | (54) PROCESS FOR A PLASTIC PRODUCT CONVERSION                                                                                                                      | United States of America                                     |
| (32) 05.02.2021                                                                                                                          | (71) Michiel Cramwinckel                                                                                                                                           | (51) E21B 43/00                                              |
| (33) China                                                                                                                               | (74) drs. A.P. van Wijk                                                                                                                                            | (21) 2026625                                                 |
| (51) B60B 35/00                                                                                                                          | (72) Michiel Cramwinckel                                                                                                                                           | (22) 05.10.2020                                              |
| B60B 35/08                                                                                                                               | (31) 2024115                                                                                                                                                       | (54) EXPANDABLE METAL WELLBORE ANCHOR                        |
| B60G 7/00                                                                                                                                | PCT/EP2020/075469                                                                                                                                                  | (71) Halliburton Energy Services, Inc.                       |
| B60G 9/00                                                                                                                                | (32) 29.10.2019                                                                                                                                                    | (74) mr.ir. F.N. Ferro                                       |
| B60G 11/04                                                                                                                               | 11.09.2020                                                                                                                                                         | (72) Stephan Michael Greci                                   |
| B60G 11/113                                                                                                                              | (33) Netherlands                                                                                                                                                   | Michael Linley Fripp                                         |
| B60G 11/46                                                                                                                               | European Patent Office (EPO)                                                                                                                                       | (31) US16/666,713                                            |
| F16F 1/26                                                                                                                                | (51) C12N 15/82                                                                                                                                                    | PCT/US19/58464                                               |
| (21) 2024078                                                                                                                             | (21) 2027897                                                                                                                                                       | (32) 29.10.2019                                              |
| (22) 22.10.2019                                                                                                                          | (22) 01.04.2021                                                                                                                                                    | 29.10.2019                                                   |
| (54) Axle clamping arrangement with extension mechanism for tensioning link                                                              | (54) USE OF GMAAP PROTEIN AND GMAAP GENE IN BREEDING SOYBEANS                                                                                                      | (33) United States of America                                |
| (71) VDL Weweler B.V.                                                                                                                    | (71) HENAN AGRICULTURAL UNIVERSITY                                                                                                                                 | United States of America                                     |
| (74) ir. J.C. Volmer c.s.                                                                                                                | (74) ir. W.J.J.M. Kempes                                                                                                                                           | (51) F21V 21/00                                              |
| (72) Derk Geert Aalderink                                                                                                                | (72) Dan Zhang                                                                                                                                                     | (21) 2026762                                                 |
| Marten Frank Ciarán Bruinja                                                                                                              | Haiyan Lv                                                                                                                                                          | (22) 25.10.2020                                              |
| Tom Schrier                                                                                                                              | Yuming Yang                                                                                                                                                        | (54) LAMP HOLDER FOR FASTENING LAMP                          |
| (41) 13.07.2021                                                                                                                          | Hengyou Zhang                                                                                                                                                      | (71) Guangdong Kangrong High-tech New Material Co., Ltd.     |
| (51) B60R 1/076                                                                                                                          | Li Wang                                                                                                                                                            | (74) dr. J. van Straaten                                     |
| (21) 2024080                                                                                                                             | (31) 202011354096.3                                                                                                                                                | (72) Renlin Huang                                            |
| (22) 22.10.2019                                                                                                                          | (32) 27.11.2020                                                                                                                                                    | (31) 201911044829.0                                          |
| (54) Fastening construction, exterior vision unit of a motor vehicle and method for assembling or disassembling a fastening construction | (33) China                                                                                                                                                         | (32) 30.10.2019                                              |
| (71) MCi (Mirror Controls International) Netherlands B.V.                                                                                | (51) E01C 13/08                                                                                                                                                    | (33) China                                                   |
| (74) ir. H.A. Witmans c.s.                                                                                                               | E02D 3/00                                                                                                                                                          | (51) F21V 21/14                                              |
| (72) Patrick Johannes Linthorst                                                                                                          | (21) 1043436                                                                                                                                                       | G03B 15/06                                                   |
| Vincent Huibert van Rooijen                                                                                                              | (22) 22.10.2019                                                                                                                                                    | (21) 2025614                                                 |
| (41) 13.07.2021                                                                                                                          | (54) Substraatmengsel ten behoeve van het produceren van een versterkte grasmat, in het bijzonder een grasmat voor sportbeoefening met CO2-opnemende eigenschappen | (22) 19.05.2020                                              |
| (51) B60S 1/04                                                                                                                           | (71) A. Agterberg B.V.                                                                                                                                             | (54) Quickly-assembled Display Device with LED               |
| (21) 2024098                                                                                                                             | (72) Kees Haaksman                                                                                                                                                 | (71) Shanghai Edge Light Industry Co., Ltd.                  |
| (22) 24.10.2019                                                                                                                          | (41) 13.07.2021                                                                                                                                                    | (74) J. Hoekstra                                             |
| (54) Cleaning unit, scraper unit, optical sensing device and method for cleaning                                                         | (51) E04G 21/16                                                                                                                                                    | (72) Lei You                                                 |
| (71) MCi (Mirror Controls International) Netherlands B.V.                                                                                | B66B 9/16                                                                                                                                                          | (41) 07.07.2021                                              |
| (74) ir. H.A. Witmans c.s.                                                                                                               | E04D 15/04                                                                                                                                                         | (31) 202010135961.9                                          |
| (72) Ilona Bakker                                                                                                                        | (21) 2024081                                                                                                                                                       | (32) 02.03.2020                                              |
| Dave Lambert Adrian van Soest                                                                                                            | (22) 22.10.2019                                                                                                                                                    | (33) China                                                   |
| Jannick Daniël Wijntjes                                                                                                                  | (54) SET AND METHOD FOR DELIVERING ROOF COVERING PANELS, CARRIER DEVICE AND STACK FORMING MEANS                                                                    | (51) G01N 1/04                                               |
| Meindert Jan Solkesz                                                                                                                     | (71) Van Middendorp Montage B.V.                                                                                                                                   | (21) 2027886                                                 |
|                                                                                                                                          | (74) dr. ir. G.J.C. Verdijk c.s.                                                                                                                                   | (22) 31.03.2021                                              |
|                                                                                                                                          |                                                                                                                                                                    | (54) SOIL SAMPLING DEVICE AND SOIL SAMPLING VEHICLE          |
|                                                                                                                                          |                                                                                                                                                                    | (71) SHANDONG UNIVERSITY OF TECHNOLOGY                       |
|                                                                                                                                          |                                                                                                                                                                    | (74) ir. W.J.J.M. Kempes                                     |



|                                                                                                                                                         |                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
| (72) Lili Yi                                                                                                                                            | (22) 22.10.2019                                       |
| Fanxia Kong                                                                                                                                             | (54) A mechanical watch                               |
| Yubin Lan                                                                                                                                               | (71) Flexous Mechanisms IP B.V.                       |
| Rongxin Zhang                                                                                                                                           | (74) mr. ir. J. van Breda c.s.                        |
| (31) 202010570521.6                                                                                                                                     | (72) Sybren Lennard Weeke                             |
| (32) 18.06.2020                                                                                                                                         | Maarten Pieter Lustig                                 |
| (33) China                                                                                                                                              | (41) 13.07.2021                                       |
| (51) G01V 99/00                                                                                                                                         | (51) G09F 3/03                                        |
| (21) 2027951                                                                                                                                            | (21) 2024091                                          |
| (22) 13.04.2021                                                                                                                                         | (22) 24.10.2019                                       |
| (54) FINE-SCALE DELINEATION METHOD<br>FOR ASSESSING LAND SENSITIVITY<br>TO DESERTIFICATION                                                              | (54) EASY TEAR STICKER ASSEMBLY<br>WITH PATTERN LAYER |
| (71) NANJING INSTITUTE OF<br>ENVIRONMENTAL SCIENCES,<br>MINISTRY OF ECOLOGICAL<br>ENVIRONMENT                                                           | (71) SEAL KING INDUSTRIAL CO., LTD                    |
| NANJING UNIVERSITY OF<br>INFORMATION SCIENCE &<br>TECHNOLOGY                                                                                            | (74) ir. W.J.J.M. Kempes                              |
| SHANGHAI MUNICIPAL BUREAU OF<br>ECOLOGY AND ENVIRONMENT                                                                                                 | (72) Chia-Lu Wu                                       |
| Yansong Wang                                                                                                                                            | (41) 13.07.2021                                       |
| (74) ir. W.J.J.M. Kempes                                                                                                                                |                                                       |
| (72) Hui Zhang                                                                                                                                          |                                                       |
| Mengtian Hu                                                                                                                                             |                                                       |
| Yansong Wang                                                                                                                                            |                                                       |
| Jixi Gao                                                                                                                                                |                                                       |
| Kuanbiao Qiu                                                                                                                                            |                                                       |
| Wenming Pei                                                                                                                                             |                                                       |
| Mengxiao Ma                                                                                                                                             |                                                       |
| Yajun Qiao                                                                                                                                              |                                                       |
| Hongling Zhang                                                                                                                                          |                                                       |
| Jining Qu                                                                                                                                               |                                                       |
| Long Gong                                                                                                                                               |                                                       |
| (31) 202010300020.6                                                                                                                                     |                                                       |
| (32) 16.04.2020                                                                                                                                         |                                                       |
| (33) China                                                                                                                                              |                                                       |
| (51) G02B 5/08                                                                                                                                          |                                                       |
| H05G 2/00                                                                                                                                               |                                                       |
| (21) 2026306                                                                                                                                            |                                                       |
| (22) 20.08.2020                                                                                                                                         |                                                       |
| (54) EXTREME ULTRAVIOLET LIGHT<br>CONDENSER MIRROR, EXTREME<br>ULTRAVIOLET LIGHT GENERATION<br>APPARATUS, AND ELECTRONIC<br>DEVICE MANUFACTURING METHOD |                                                       |
| (71) Gigaphoton Inc.                                                                                                                                    |                                                       |
| (74) ir. A. Blokland c.s.                                                                                                                               |                                                       |
| (72) Tomoyoshi Toida                                                                                                                                    |                                                       |
| (31) 2019-196669                                                                                                                                        |                                                       |
| (32) 29.10.2019                                                                                                                                         |                                                       |
| (33) Japan                                                                                                                                              |                                                       |
| (51) G02F 1/1333                                                                                                                                        |                                                       |
| G06F 1/16                                                                                                                                               |                                                       |
| (21) 2024096                                                                                                                                            |                                                       |
| (22) 24.10.2019                                                                                                                                         |                                                       |
| (54) CONNECTING DISPLAY SCREEN TO<br>DEVICE BODY                                                                                                        |                                                       |
| (71) Microsoft Technology Licensing, LLC                                                                                                                |                                                       |
| (74) ir. J.C. Volmer c.s.                                                                                                                               |                                                       |
| (72) Colin Michael Ravenscroft                                                                                                                          |                                                       |
| Jason Dale Brown                                                                                                                                        |                                                       |
| Shannon Elizabeth Miller                                                                                                                                |                                                       |
| (41) 13.07.2021                                                                                                                                         |                                                       |
| (51) G04B 17/04                                                                                                                                         |                                                       |
| G04B 15/14                                                                                                                                              |                                                       |
| (21) 2024076                                                                                                                                            |                                                       |

NP2

**Ingeschreven en verleende octrooien op grond van de Octrooiwet 1995.**

**Contains data concerning Netherlands patents which have been entered in the patent register under the Patents Act 1995.**

|                                                                                                                                                    |                                                                                                           |                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) A01K 1/01<br>A01K 1/015                                                                                                                       | (72) Dirk Hermen van der Waal<br>Peter Martin Andeweg                                                     | (54) KOZIJN EN WERKWIJZE VOOR HET<br>VERVAARDIGEN DAARVAN                                                                                         |
| (11) 2024094                                                                                                                                       | (74) mr. ir. J. van Breda c.s.                                                                            | (73) Hendriks Holding BV                                                                                                                          |
| (47) 13.07.2021                                                                                                                                    | (51) A45D 29/05                                                                                           | (72) Patrick Herman Marie Hendriks                                                                                                                |
| (22) 24.10.2019                                                                                                                                    | (11) 2024086                                                                                              | (74) dr. T. Hubregtse                                                                                                                             |
| (54) A SYSTEM FOR GATHERING<br>EXCRETA OF PRODUCTION ANIMALS                                                                                       | (47) 13.07.2021                                                                                           | (51) B07C 5/34                                                                                                                                    |
| (73) IM-ACES B.V.                                                                                                                                  | (22) 23.10.2019                                                                                           | G06K 9/36                                                                                                                                         |
| (72) Franciscus Johannes Josephus van<br>Poppel                                                                                                    | (54) Nail polish file                                                                                     | G06K 19/063                                                                                                                                       |
| (74) ir. P.J.P. Janssen                                                                                                                            | (73) SWIVA                                                                                                | (11) 2024079                                                                                                                                      |
| (51) A01K 1/01<br>A01K 1/015                                                                                                                       | (72) Marinus Johannes Maria Swinkels                                                                      | (47) 13.07.2021                                                                                                                                   |
| (11) 2024095                                                                                                                                       | (74) mr. ir. J. van Breda c.s.                                                                            | (22) 22.10.2019                                                                                                                                   |
| (47) 13.07.2021                                                                                                                                    | (51) A61B 90/00                                                                                           | (54) Method of identifying an item, waste<br>separation and item comprising a dot<br>code                                                         |
| (22) 24.10.2019                                                                                                                                    | A61N 7/00                                                                                                 | (73) FiliMade Holding B.V.                                                                                                                        |
| (54) A SYSTEM FOR GATHERING<br>EXCRETA OF PRODUCTION ANIMALS                                                                                       | A61B 5/055                                                                                                | (72) Johannes Bernardus Kerver                                                                                                                    |
| (73) IM-ACES B.V.                                                                                                                                  | A61B 90/50                                                                                                | Bjørn-Erik Johan Willem Pieter Hendrik<br>van Dommelen                                                                                            |
| (72) Franciscus Johannes Josephus van<br>Poppel                                                                                                    | (11) 2025628                                                                                              | (74) ir. J.C. Volmer c.s.                                                                                                                         |
| (74) ir. P.J.P. Janssen                                                                                                                            | (47) 07.07.2021                                                                                           | (51) B08B 3/02                                                                                                                                    |
| (51) A01K 13/00                                                                                                                                    | (22) 20.05.2020                                                                                           | (11) 2024204                                                                                                                                      |
| A45D 8/00                                                                                                                                          | (54) Low-intensity Focused Ultrasonic<br>Blasting System Guided by Ultrahigh-<br>field Magnetic Resonance | (47) 09.07.2021                                                                                                                                   |
| (11) 2024093                                                                                                                                       | (73) Harbin Medical University                                                                            | (22) 08.11.2019                                                                                                                                   |
| (47) 13.07.2021                                                                                                                                    | (72) Xilin Sun                                                                                            | (54) Hogedrukreinigingssysteem en werkwijze<br>voor het reinigen van een oppervlak                                                                |
| (22) 24.10.2019                                                                                                                                    | Kai Wang                                                                                                  | (73) Meclean Professional Cleaningmachines<br>B.V.                                                                                                |
| (54) Equine grooming device                                                                                                                        | Jie Yang                                                                                                  | (72) Cornelis Johan Verhelst                                                                                                                      |
| (73) HES-tec B.V.                                                                                                                                  | Yingbo Li                                                                                                 | (74) ir. M. van der Velden                                                                                                                        |
| (72) Johannes Hubertus Jozef Maria Kelders<br>Erwin Lambertus Leonardus Samuels<br>Frank van Helvert                                               | Haoxiang Li                                                                                               | (51) B60B 35/00                                                                                                                                   |
| (74) ir. H.Th. van den Heuvel c.s.                                                                                                                 | Lina Wu                                                                                                   | B60B 35/08                                                                                                                                        |
| (51) A01K 61/70                                                                                                                                    | Lili Yang                                                                                                 | B60G 7/00                                                                                                                                         |
| E02B 3/14                                                                                                                                          | Shuang Miao                                                                                               | B60G 9/00                                                                                                                                         |
| (11) 2027693                                                                                                                                       | Ying Jiang                                                                                                | B60G 11/04                                                                                                                                        |
| (47) 07.07.2021                                                                                                                                    | (74) J. Hoekstra                                                                                          | B60G 11/113                                                                                                                                       |
| (22) 03.03.2021                                                                                                                                    | (31) 201910696892.6                                                                                       | B60G 11/46                                                                                                                                        |
| (54) TRIANGULAR-PLATFORM FISH REEF<br>FOR IMPROVING HABITATS OF<br>FISHES IN RIVER BENDS AND RIVER<br>BEACHES IN UPPER REACHES OF<br>YANGTZE RIVER | (32) 30.07.2019                                                                                           | F16F 1/26                                                                                                                                         |
| (73) SHANGHAI OCEAN UNIVERSITY                                                                                                                     | (33) China                                                                                                | (11) 2024078                                                                                                                                      |
| (72) Kai Wang                                                                                                                                      | (51) A63B 59/70                                                                                           | (47) 13.07.2021                                                                                                                                   |
| Xunmeng Li                                                                                                                                         | A63B 60/28                                                                                                | (22) 22.10.2019                                                                                                                                   |
| Ling Chen                                                                                                                                          | A63B 49/08                                                                                                | (54) Axle clamping arrangement with<br>extension mechanism for tensioning link                                                                    |
| Shouyu Zhang                                                                                                                                       | A63B 59/55                                                                                                | (73) VDL Weweler B.V.                                                                                                                             |
| Zhenhua Wang                                                                                                                                       | (11) 2026120                                                                                              | (72) Derk Geert Aalderink                                                                                                                         |
| (74) ir. H.Th. van den Heuvel c.s.                                                                                                                 | (47) 07.07.2021                                                                                           | Marten Frank Ciarán Bruinja<br>Tom Schrier                                                                                                        |
| (51) A22B 5/16                                                                                                                                     | (22) 23.07.2020                                                                                           | (74) ir. J.C. Volmer c.s.                                                                                                                         |
| A22C 21/00                                                                                                                                         | (54) SPORTS GEAR HAVING AN<br>EXTENSION                                                                   | (51) B60R 1/076                                                                                                                                   |
| (11) 2024085                                                                                                                                       | (73) Sport Extensions B.V.                                                                                | (11) 2024080                                                                                                                                      |
| (47) 13.07.2021                                                                                                                                    | (72) Bart Jan Becking                                                                                     | (47) 13.07.2021                                                                                                                                   |
| (22) 23.10.2019                                                                                                                                    | Rolf Henri Jean Hogestijn                                                                                 | (22) 22.10.2019                                                                                                                                   |
| (54) Deskinning apparatus and method for<br>deskinning a poultry leg or part of a<br>poultry leg                                                   | (74) ir. M. Cramwinckel                                                                                   | (54) Fastening construction, exterior vision<br>unit of a motor vehicle and method for<br>assembling or disassembling a fastening<br>construction |
| (73) Meyn Food Processing Technology B.V.                                                                                                          | (31) 2023559                                                                                              | (73) MCI (Mirror Controls International)<br>Netherlands B.V.                                                                                      |
|                                                                                                                                                    | 2025259                                                                                                   | (72) Patrick Johannes Linthorst<br>Vincent Huibert van Rooijen                                                                                    |
|                                                                                                                                                    | (32) 24.07.2019                                                                                           | (74) ir. H.A. Witmans c.s.                                                                                                                        |
|                                                                                                                                                    | 02.04.2020                                                                                                |                                                                                                                                                   |
|                                                                                                                                                    | (33) Netherlands                                                                                          |                                                                                                                                                   |
|                                                                                                                                                    | Netherlands                                                                                               |                                                                                                                                                   |
|                                                                                                                                                    | (51) B05B 12/24                                                                                           |                                                                                                                                                   |
|                                                                                                                                                    | E06B 1/70                                                                                                 |                                                                                                                                                   |
|                                                                                                                                                    | (11) 2024089                                                                                              |                                                                                                                                                   |
|                                                                                                                                                    | (47) 13.07.2021                                                                                           |                                                                                                                                                   |
|                                                                                                                                                    | (22) 23.10.2019                                                                                           |                                                                                                                                                   |

|                                                                                                                                                                    |                                                                                                      |                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| (51) B60S 1/04                                                                                                                                                     | (72) Kees Haaksman                                                                                   | Suliang Zhang                                      |
| (11) 2024098                                                                                                                                                       | (51) E04G 21/16                                                                                      | Xiaobo Zou                                         |
| (47) 13.07.2021                                                                                                                                                    | B66B 9/16                                                                                            | Fangyu Shu                                         |
| (22) 24.10.2019                                                                                                                                                    | E04D 15/04                                                                                           | Xiaodi Zhou                                        |
| (54) Cleaning unit, scraper unit, optical sensing device and method for cleaning                                                                                   | (11) 2024081                                                                                         | (74) J.M.H. Duyver lic.                            |
| (73) MCI (Mirror Controls International) Netherlands B.V.                                                                                                          | (47) 13.07.2021                                                                                      | (51) G02F 1/1333                                   |
| (72) Ilona Bakker                                                                                                                                                  | (22) 22.10.2019                                                                                      | G06F 1/16                                          |
| Dave Lambert Adrian van Soest                                                                                                                                      | (54) SET AND METHOD FOR DELIVERING ROOF COVERING PANELS, CARRIER DEVICE AND STACK FORMING MEANS      | (11) 2024096                                       |
| Jannick Daniël Wijntjes                                                                                                                                            | (73) Van Middendorp Montage B.V.                                                                     | (47) 13.07.2021                                    |
| Meindert Jan Solkesz                                                                                                                                               | (72) Teunis Willem van Middendorp                                                                    | (22) 24.10.2019                                    |
| (74) ir. H.A. Witmans c.s.                                                                                                                                         | (74) dr. ir. G.J.C. Verdijck c.s.                                                                    | (54) CONNECTING DISPLAY SCREEN TO DEVICE BODY      |
| (51) B63B 35/03                                                                                                                                                    | (51) E21B 43/10                                                                                      | (73) Microsoft Technology Licensing, LLC           |
| B65H 49/32                                                                                                                                                         | (11) 2025031                                                                                         | (72) Colin Michael Ravenscroft                     |
| B65H 75/42                                                                                                                                                         | (47) 07.07.2021                                                                                      | Jason Dale Brown                                   |
| F16L 1/20                                                                                                                                                          | (22) 03.03.2020                                                                                      | Shannon Elizabeth Miller                           |
| (11) 2024088                                                                                                                                                       | (54) A WELL BARRIER AND RELEASE DEVICE FOR USE IN DRILLING OPERATIONS                                | (74) ir. J.C. Volmer c.s.                          |
| (47) 13.07.2021                                                                                                                                                    | (73) Halliburton Energy Services, Inc.                                                               | (51) G04B 17/04                                    |
| (22) 23.10.2019                                                                                                                                                    | (72) Arthur T. Stautzenberger                                                                        | G04B 15/14                                         |
| (54) MARINE PIPELINE INSTALLATIONS                                                                                                                                 | Klaus Mikkelsen                                                                                      | (11) 2024076                                       |
| (73) Royal IHC Limited                                                                                                                                             | (74) mr.ir. F.N. Ferro                                                                               | (47) 13.07.2021                                    |
| (72) Michael John Watchorn                                                                                                                                         | (31) 62/817,201                                                                                      | (22) 22.10.2019                                    |
| Michael James Smith                                                                                                                                                | 16/800,228                                                                                           | (54) A mechanical watch                            |
| (74) dr. A. Krebs                                                                                                                                                  | (32) 12.03.2019                                                                                      | (73) Flexous Mechanisms IP B.V.                    |
| (51) C12N 1/20                                                                                                                                                     | 25.02.2020                                                                                           | (72) Sybren Lennard Weeke                          |
| C12Q 1/04                                                                                                                                                          | (33) United States of America                                                                        | Maarten Pieter Lustig                              |
| (11) 2026576                                                                                                                                                       | United States of America                                                                             | (74) mr. ir. J. van Breda c.s.                     |
| (47) 09.07.2021                                                                                                                                                    | (51) F21V 21/14                                                                                      | (51) G09F 3/03                                     |
| (22) 29.09.2020                                                                                                                                                    | G03B 15/06                                                                                           | (11) 2024091                                       |
| (54) SCREENING METHOD OF BACTERIA HAVING A PHOSPHORUS SOLUBILIZATION FUNCTION                                                                                      | (11) 2025614                                                                                         | (47) 13.07.2021                                    |
| (73) Institute of Zoology, Guangdong Academy of Sciences                                                                                                           | (47) 07.07.2021                                                                                      | (22) 24.10.2019                                    |
| (72) Chengmin Wang                                                                                                                                                 | (22) 19.05.2020                                                                                      | (54) EASY TEAR STICKER ASSEMBLY WITH PATTERN LAYER |
| Zhihui Liu                                                                                                                                                         | (54) Quickly-assembled Display Device with LED                                                       | (73) SEAL KING INDUSTRIAL CO., LTD                 |
| Jianan Zhao                                                                                                                                                        | (73) Shanghai Edge Light Industry Co., Ltd.                                                          | (72) Chia-Lu Wu                                    |
| Xue Wang                                                                                                                                                           | (72) Lei You                                                                                         | (74) ir. W.J.J.M. Kempes                           |
| Jianhua Qin                                                                                                                                                        | (74) J. Hoekstra                                                                                     |                                                    |
| (74) drs. C.M.A. Quintelier                                                                                                                                        | (31) 202010135961.9                                                                                  |                                                    |
| (51) C12N 1/20                                                                                                                                                     | (32) 02.03.2020                                                                                      |                                                    |
| C12Q 1/04                                                                                                                                                          | (33) China                                                                                           |                                                    |
| (11) 2026574                                                                                                                                                       | (51) F24C 3/12                                                                                       |                                                    |
| (47) 09.07.2021                                                                                                                                                    | F24C 3/08                                                                                            |                                                    |
| (22) 29.09.2020                                                                                                                                                    | (11) 2025844                                                                                         |                                                    |
| (54) PRELIMINARY SCREENING METHOD OF BACTERIA HAVING AN AMMONIA NITROGEN DEGRADATION FUNCTION                                                                      | (47) 07.07.2021                                                                                      |                                                    |
| (73) Institute of Zoology, Guangdong Academy of Sciences                                                                                                           | (22) 17.06.2020                                                                                      |                                                    |
| (72) Chengmin Wang                                                                                                                                                 | (54) A LEAK-PROOF GAS STOVE                                                                          |                                                    |
| Zhihui Liu                                                                                                                                                         | (73) Nanjing Enwell Technology Service Co., Ltd.                                                     |                                                    |
| Jianan Zhao                                                                                                                                                        | (72) Xianfeng Wu                                                                                     |                                                    |
| Xue Wang                                                                                                                                                           | Guiyu Li                                                                                             |                                                    |
| (74) drs. C.M.A. Quintelier                                                                                                                                        | (74) ir. J.C. Volmer c.s.                                                                            |                                                    |
| (51) E01C 13/08                                                                                                                                                    | (51) G01N 33/10                                                                                      |                                                    |
| E02D 3/00                                                                                                                                                          | B01L 3/00                                                                                            |                                                    |
| (11) 1043436                                                                                                                                                       | G01N 21/78                                                                                           |                                                    |
| (47) 13.07.2021                                                                                                                                                    | (11) 2026197                                                                                         |                                                    |
| (22) 22.10.2019                                                                                                                                                    | (47) 07.07.2021                                                                                      |                                                    |
| (54) Substraatmengsel ten behoeve van het produceren van een versterkte grasmat, in het bijzonder een grasmat voor sportbeoefening met CO2-opnemende eigenschappen | (22) 03.08.2020                                                                                      |                                                    |
| (73) A. Agterberg B.V.                                                                                                                                             | (54) INTELLIGENT DEVICE AND METHOD FOR TESTING POTASSIUM BROMATE IN FLOUR BASED ON MICROFLUIDIC CHIP |                                                    |
|                                                                                                                                                                    | (73) JIANGSU UNIVERSITY                                                                              |                                                    |
|                                                                                                                                                                    | (72) Ning Yang                                                                                       |                                                    |

**NP3**

**Nederlandse octrooien na gedeeltelijke afstand conform artikel 63 van de Octrooiwet 1995..  
Contains data concerning Netherlands patents which have been entered in the patent  
register (after limitation procedure) under the Patents Act 1995.**

## **EP1**

**Vertaalde conclusies van Europese octrooiaanvragen.**

**Contains data concerning translations of the claims of European patent applications.**

# EP2

## Voor Nederland verleende Europese octrooien.

### Contains data concerning European patents granted for The Netherlands.

|                                                                               |                                                                                              |                                                                                                                                                                           |
|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) A01B 49/06                                                               | A01B 63/102                                                                                  | (47) 14.07.2021                                                                                                                                                           |
| A01B 69/04                                                                    | A01B 63/111                                                                                  | (22) 09.05.2018                                                                                                                                                           |
| A01B 79/00                                                                    | A01B 63/112                                                                                  | (54) AERIAL VEHICLE SYSTEMS AND METHODS                                                                                                                                   |
| A01B 79/02                                                                    | A01B 63/32                                                                                   | (73) CNH Industrial Belgium NV                                                                                                                                            |
| A01C 7/08                                                                     | (11) EP3391721                                                                               | (72) Brubaker, Christopher A.                                                                                                                                             |
| A01C 21/00                                                                    | (21) EP16876022.1                                                                            | (31) 201715606286                                                                                                                                                         |
| (11) EP3494767                                                                | (47) 14.07.2021                                                                              | (32) 26.05.2017                                                                                                                                                           |
| (21) EP18215641.4                                                             | (87) KR2016014653                                                                            | (33) United States of America                                                                                                                                             |
| (47) 14.07.2021                                                               | 22.06.2017                                                                                   |                                                                                                                                                                           |
| (22) 23.09.2015                                                               | (22) 14.12.2016                                                                              | (51) A01C 7/04                                                                                                                                                            |
| (54) TECHNIQUES FOR AUTOMATED PLANTING                                        | (54) AGRICULTURAL WORK VEHICLE AND METHOD FOR CONTROLLING HITCH OF AGRICULTURAL WORK VEHICLE | A01C 7/20                                                                                                                                                                 |
| (73) Biocarbon Engineering Ltd.                                               | (73) LS Mtron Ltd.                                                                           | (11) EP2953443                                                                                                                                                            |
| Fletcher, Lauren E.                                                           | (72) LEE, Jin Woong                                                                          | (21) EP14705822.6                                                                                                                                                         |
| Ritchie, Matthew S.                                                           | (31) 20150180723                                                                             | (47) 14.07.2021                                                                                                                                                           |
| Graham, Susan M.                                                              | 20160169919                                                                                  | (87) FR2014050088                                                                                                                                                         |
| (72) FLETCHER, Lauren E.                                                      | (32) 17.12.2015                                                                              | 14.08.2014                                                                                                                                                                |
| RITCHIE, Matthew S.                                                           | 13.12.2016                                                                                   | (22) 16.01.2014                                                                                                                                                           |
| GRAHAM, Susan M.                                                              | (33) Korea (Republic)                                                                        | (54) SINGLE-GRAIN SEEDER WITH AT LEAST ONE IMPROVED SEEDING ELEMENT                                                                                                       |
| BIAN, Shunning                                                                | Korea (Republic)                                                                             | (73) Kuhn SAS                                                                                                                                                             |
| (31) 201462054280 P                                                           | (51) A01B 63/112                                                                             | (72) AUDIGIE, Jean-Charles                                                                                                                                                |
| 201562209227 P                                                                | (11) EP3522695                                                                               | EBERHART, Julien                                                                                                                                                          |
| (32) 23.09.2014                                                               | (21) EP17718229.2                                                                            | (31) 1351055                                                                                                                                                              |
| 24.08.2015                                                                    | (47) 07.07.2021                                                                              | (32) 07.02.2013                                                                                                                                                           |
| (33) United States of America                                                 | (87) US2017025782                                                                            | (33) France                                                                                                                                                               |
| United States of America                                                      | 12.04.2018                                                                                   |                                                                                                                                                                           |
| (51) A01B 49/06                                                               | (22) 03.04.2017                                                                              | (51) A01C 7/06                                                                                                                                                            |
| A01C 5/06                                                                     | (54) SLIP CONTROL SYSTEM FOR AN OFF-ROAD VEHICLE                                             | A01C 7/10                                                                                                                                                                 |
| (11) EP3515167                                                                | (73) CNH Industrial America LLC                                                              | A01C 7/12                                                                                                                                                                 |
| (21) EP17772325.1                                                             | Autonomous Solutions, Inc.                                                                   | A01C 7/20                                                                                                                                                                 |
| (47) 07.07.2021                                                               | (72) FOSTER, Christopher A.                                                                  | A01C 19/02                                                                                                                                                                |
| (87) EP2017072439                                                             | POSSELIUS, John H.                                                                           | A01C 21/00                                                                                                                                                                |
| 29.03.2018                                                                    | VEIKLE, Eric Emerson                                                                         | G01V 8/20                                                                                                                                                                 |
| (22) 07.09.2017                                                               | HORNBERGER, Michael G.                                                                       | (11) EP3344031                                                                                                                                                            |
| (54) SOWING MACHINE FOR DISPENSING SEEDS AND/OR FERTILISER                    | TURPIN, Bret Todd                                                                            | (21) EP16842824.1                                                                                                                                                         |
| (73) Amazonen-Werke H. Dreyer SE & Co. KG                                     | MORWOOD, Daniel John                                                                         | (47) 14.07.2021                                                                                                                                                           |
| (72) SCHWAMM, Victor                                                          | (31) 201615287059                                                                            | (87) US2016049499                                                                                                                                                         |
| (31) 102016118093                                                             | (32) 06.10.2016                                                                              | 09.03.2017                                                                                                                                                                |
| (32) 26.09.2016                                                               | (33) United States of America                                                                | (22) 30.08.2016                                                                                                                                                           |
| (33) Germany                                                                  | (51) A01B 69/04                                                                              | (54) METERING ASSEMBLY                                                                                                                                                    |
| (51) A01B 59/00                                                               | A01B 79/00                                                                                   | (73) Precision Planting LLC                                                                                                                                               |
| A01B 71/02                                                                    | G01C 21/20                                                                                   | (72) STUBER, Luke                                                                                                                                                         |
| A01F 15/00                                                                    | (11) EP3534684                                                                               | (31) 201562212419 P                                                                                                                                                       |
| (11) EP3498066                                                                | (21) EP17792151.7                                                                            | (32) 31.08.2015                                                                                                                                                           |
| (21) EP18195056.9                                                             | (47) 07.07.2021                                                                              | (33) United States of America                                                                                                                                             |
| (47) 14.07.2021                                                               | (87) GB2017053227                                                                            |                                                                                                                                                                           |
| (22) 18.09.2018                                                               | 11.05.2018                                                                                   | (51) A01C 7/08                                                                                                                                                            |
| (54) DRIVER ASSISTANCE SYSTEM FOR DRIVING AN AGRICULTURAL VEHICLE COMBINATION | (22) 26.10.2017                                                                              | (11) EP3698614                                                                                                                                                            |
| (73) CLAAS Selbstfahrende Erntemaschinen GmbH                                 | (54) PRECISION GUIDANCE SYSTEM FOR AGRICULTURAL VEHICLES                                     | (21) EP19159073.6                                                                                                                                                         |
| (72) Berger, Arthur                                                           | (73) Agriscion Limited                                                                       | (47) 07.07.2021                                                                                                                                                           |
| Dieckmeyer, Sascha                                                            | (72) KEENE, Adam                                                                             | (22) 25.02.2019                                                                                                                                                           |
| Meyer, Lennart                                                                | (31) 201618452                                                                               | (54) DEVICE FOR A DISTRIBUTOR TOWER OF AN AGRICULTURAL MACHINE FOR APPLYING A GRANULAR MATERIAL WITH ASSISTANCE OF FLUID FLOW, DISTRIBUTOR TOWER AND AGRICULTURAL MACHINE |
| (31) 102017130146                                                             | (32) 02.11.2016                                                                              | (73) Kverneland A/S                                                                                                                                                       |
| (32) 15.12.2017                                                               | (33) United Kingdom                                                                          | (72) Schumacher, Ferdinand                                                                                                                                                |
| (33) Germany                                                                  | (51) A01B 79/00                                                                              | Matrangolo, Enrico                                                                                                                                                        |
| (51) A01B 59/06                                                               | A01D 41/127                                                                                  |                                                                                                                                                                           |
|                                                                               | (11) EP3406123                                                                               | (51) A01C 17/00                                                                                                                                                           |
|                                                                               | (21) EP18171500.4                                                                            | (11) EP3692778                                                                                                                                                            |

|                                         |                                  |                                          |
|-----------------------------------------|----------------------------------|------------------------------------------|
| (21) EP20155778.2                       | (51) A01D 34/28                  | (54) MOWER APPARATUS                     |
| (47) 07.07.2021                         | A01D 41/14                       | (73) Kubota Corporation                  |
| (22) 06.02.2020                         | (11) EP3363276                   | (72) TAKAOKA, Masaki                     |
| (54) DEVICE FOR DISPENSING PARTICLES    | (21) EP18156361.0                | TONOYA, Yoshihisa                        |
| FOR SPREADING WITH ROTARY               | (47) 14.07.2021                  | MIHARA, Akihito                          |
| SLIDE VALVE, AND CORRESPONDING          | (22) 12.02.2018                  | KIMURA, Arisa                            |
| AGRICULTURAL MACHINE                    | (54) COMBINATION FLEX AND RIGID  | MATSUMOTO, Ryo                           |
| (73) Burel Production                   | HEADER HEIGHT CONTROL IN A       | KAGO, Tatsuki                            |
| (72) ARRIBARD, Gwennvel                 | HARVESTER                        | TOKUNAGA, Tatsuro                        |
| LEVEILLE, Lionel                        | (73) CNH Industrial Belgium NV   | (31) 2017201071                          |
| (31) 1901211                            | (72) Cook, Joel T.               | (32) 17.10.2017                          |
| (32) 07.02.2019                         | (31) 201715434828                | (33) Japan                               |
| (33) France                             | (32) 16.02.2017                  | (51) A01D 41/12                          |
| (51) A01D 23/04                         | (33) United States of America    | (11) EP3618603                           |
| (11) EP3721693                          | (51) A01D 34/66                  | (21) EP18722502.4                        |
| (21) EP19168995.9                       | A01D 43/063                      | (47) 14.07.2021                          |
| (47) 14.07.2021                         | B62D 49/06                       | (87) EP2018061421                        |
| (22) 12.04.2019                         | (11) EP3598887                   | 08.11.2018                               |
| (54) DEVICE FOR REMOVING LEAVES         | (21) EP19179216.7                | (22) 03.05.2018                          |
| FROM ROOT CROPS                         | (47) 07.07.2021                  | (54) OVER-CENTER LOCKING SYSTEM          |
| (73) Dewulf NV                          | (22) 10.06.2019                  | FOR A CHAFF PAN OF AN                    |
| (72) VAN ISEGHEM, Joeri                 | (54) SUPPORT CARRIAGE AND RIDING | AGRICULTURAL HARVESTER                   |
| DE BOE, Gert                            | GRASS MOWER HAVING THE           | (73) CNH Industrial Belgium NV           |
| (51) A01D 33/06                         | SUPPORT CARRIAGE                 | (72) DESMET, Stefaan                     |
| (11) EP3484264                          | (73) Kubota Corporation          | DUQUESNE, Frank R. G.                    |
| (21) EP17754807.0                       | (72) TASHIMA, Shinya             | PASSCHYN, Tim                            |
| (47) 07.07.2021                         | SHIBATA, Takashi                 | (31) 201705314                           |
| (87) NL2017050475                       | HIRAI, Ryota                     | (32) 04.05.2017                          |
| 18.01.2018                              | IIZUKA, Atsushi                  | (33) Belgium                             |
| (22) 13.07.2017                         | MATSUMOTO, Ryo                   | (51) A01D 41/12                          |
| (54) FOLIAGE-PROCESSING DEVICE AND      | HASHIMOTO, Taisuke               | (11) EP3599815                           |
| HARVESTING MACHINE COMPRISING           | MIHARA, Akihito                  | (21) EP18718349.6                        |
| SUCH A FOLIAGE-PROCESSING               | TONOYA, Yoshihisa                | (47) 14.07.2021                          |
| DEVICE                                  | KAGO, Tatsuki                    | (87) US2018025180                        |
| (73) Ploeger Oxbo Europe B.V.           | HABU, Kentaro                    | 04.10.2018                               |
| (72) VAN BEEK, Cornelius Johannes Maria | TAKAOKA, Masaki                  | (22) 29.03.2018                          |
| (31) 2017172                            | MIYAGUCHI, Kazutomo              | (54) AGRICULTURAL VEHICLE WITH DUAL      |
| (32) 15.07.2016                         | AKAI, Yuto                       | PURPOSE CONVEYOR                         |
| (33) Netherlands                        | KASETANI, Takahiro               | (73) CNH Industrial Belgium NV           |
| (51) A01D 34/00                         | KANAI, Toshiki                   | (72) MATOUSEK, Robert, A.                |
| (11) EP3389355                          | TOKUNAGA, Tatsuro                | RICKETTS, Jonathan, E.                   |
| (21) EP16805336.1                       | AKITA, Masayuki                  | (31) 201715474520                        |
| (47) 14.07.2021                         | KUMASHIRO, Takashi               | (32) 30.03.2017                          |
| (87) EP2016078407                       | YAMAMOTO, Tomohisa               | (33) United States of America            |
| 22.06.2017                              | YAMASHITA, Nobuyuki              | (51) A01D 41/127                         |
| (22) 22.11.2016                         | (31) 2018128511                  | A01D 43/08                               |
| (54) SYSTEM AND METHOD FOR              | 2018128512                       | G01F 1/30                                |
| PROCESSING A GROUND WITH A              | 2018176492                       | (11) EP3489632                           |
| MOBILE ROBOT UNIT                       | 2018212272                       | (21) EP18198022.8                        |
| (73) Vorwerk & Co. Interholding GmbH    | 2018213062                       | (47) 14.07.2021                          |
| (72) STRANG, Benjamin                   | 2018213063                       | (22) 01.10.2018                          |
| (31) 102015121972                       | (32) 05.07.2018                  | (54) MEASURING DEVICE FOR                |
| (32) 16.12.2015                         | 05.07.2018                       | DETERMINING A MASS FLOW                  |
| (33) Germany                            | 20.09.2018                       | COMPRISING BULK GOODS                    |
| (51) A01D 34/00                         | 12.11.2018                       | (73) CLAAS Selbstfahrende Erntemaschinen |
| A01D 41/14                              | 13.11.2018                       | GmbH                                     |
| (11) EP3530096                          | 13.11.2018                       | (72) Fischer, Frédéric                   |
| (21) EP19157907.7                       | (33) Japan                       | Kriebel, Bastian                         |
| (47) 14.07.2021                         | Japan                            | Quincke, Gunnar                          |
| (22) 19.02.2019                         | Japan                            | Brune, Markus                            |
| (54) HARVESTER WITH FEEDBACK            | Japan                            | (31) 102017127532                        |
| ASSEMBLY                                | Japan                            | (32) 22.11.2017                          |
| (73) CNH Industrial Belgium NV          | Japan                            | (33) Germany                             |
| (72) Roberge, Martin                    | (51) A01D 34/81                  | (51) A01D 41/127                         |
| (31) 201815898698                       | (11) EP3473073                   | G01F 1/20                                |
| (32) 19.02.2018                         | (21) EP18176573.6                | G01F 1/30                                |
| (33) United States of America           | (47) 14.07.2021                  | G01F 3/24                                |
|                                         | (22) 07.06.2018                  | (11) EP3301408                           |

|                                          |                                               |                                    |
|------------------------------------------|-----------------------------------------------|------------------------------------|
| (21) EP17189913.1                        | METHOD FOR CONTROLLING SAID                   | Anstotz, Arnaud                    |
| (47) 07.07.2021                          | CONVEYING SYSTEM                              | (31) 102018116603                  |
| (22) 07.09.2017                          | (73) Robert Bosch GmbH                        | (32) 10.07.2018                    |
| (54) ASSEMBLY OF A MEASURING DEVICE      | (72) NOLTE, Philipp                           | (33) Germany                       |
| FOR MEASURING A MASS FLOW OF             | SCHULZ, Udo                                   | (51) A01F 7/06                     |
| BULK MATERIAL                            | (31) 102017210852                             | A01F 12/10                         |
| (73) CLAAS Selbstfahrende Erntemaschinen | (32) 28.06.2017                               | (11) EP3632200                     |
| GmbH                                     | (33) Germany                                  | (21) EP18198420.4                  |
| (72) BRANDMEIER, Jonas                   | (51) A01D 45/02                               | (47) 14.07.2021                    |
| QUINCKE, Gunnar                          | (11) EP3461315                                | (22) 03.10.2018                    |
| KOITSCH, Roger Helmut                    | (21) EP18194925.6                             | (54) COMBINE THRESHING SYSTEM      |
| (31) 102016118560                        | (47) 07.07.2021                               | (73) CNH Industrial Belgium NV     |
| (32) 29.09.2016                          | (22) 17.09.2018                               | (72) Farley, Herb M.               |
| (33) Germany                             | (54) MANUAL AND SELF ADJUSTING DECK           | Flickinger, Wayne T.               |
| (51) A01D 41/14                          | PLATE FOR AGRICULTURAL HEADER                 | (51) A01F 15/07                    |
| (11) EP3646702                           | (73) CNH Industrial Belgium NV                | A01F 15/08                         |
| (21) EP19205916.0                        | (72) Ricketts, Jonathan E.                    | (11) EP3131383                     |
| (47) 07.07.2021                          | (31) 201715716857                             | (21) EP15722281.1                  |
| (22) 29.10.2019                          | (32) 27.09.2017                               | (47) 07.07.2021                    |
| (54) VARYING A HYDRAULIC CYLINDER        | (33) United States of America                 | (87) NL2015050236                  |
| MECHANICAL ADVANTAGE TO OBTAIN           | (51) A01D 63/04                               | 22.10.2015                         |
| SMOOTHER FLOAT PRESSURE                  | (11) EP3516946                                | (22) 10.04.2015                    |
| (73) Deere & Company                     | (21) EP19154130.9                             | (54) APPARATUS FOR FORMING A ROUND |
| (72) Brimeyer, Alex                      | (47) 14.07.2021                               | BALE WITH A TENSIONED PRESSING     |
| Vandeven, Michael L                      | (22) 29.01.2019                               | MEANS                              |
| Pierson, Joshua R                        | (54) HARVESTER WITH ADJUSTABLE ROW            | (73) Forage Company B.V.           |
| (31) 201816174762                        | DIVIDERS                                      | (72) DE JONG, Ruth                 |
| (32) 30.10.2018                          | (73) CNH Industrial Belgium NV                | REIJERSEN VAN BUUREN, Willem       |
| (33) United States of America            | (72) Hession, Adam L.                         | Jacobus                            |
| (51) A01D 41/14                          | Gutknecht, Brett                              | (31) 2012638                       |
| (11) EP3456174                           | McGraw, Nate                                  | (32) 16.04.2014                    |
| (21) EP18194306.9                        | Ricketts, Jonathan E.                         | (33) Netherlands                   |
| (47) 14.07.2021                          | (31) 201815882438                             | (51) A01G 3/037                    |
| (22) 13.09.2018                          | (32) 29.01.2018                               | A01G 3/053                         |
| (54) METHOD AND SYSTEM FOR               | (33) United States of America                 | A01G 3/06                          |
| CONTROLLING THE HEIGHT OF                | (51) A01D 75/20                               | H02P 29/02                         |
| AN AGRICULTURAL IMPLEMENT                | B60R 1/00                                     | (11) EP3398428                     |
| RELATIVE TO THE GROUND                   | B66C 15/04                                    | (21) EP18170281.2                  |
| (73) CNH Industrial Belgium NV           | B66C 23/00                                    | (47) 07.07.2021                    |
| (72) Seiders, Kenneth                    | B66C 23/88                                    | (22) 01.05.2018                    |
| (31) 201762559788 P                      | E02F 9/26                                     | (54) POWER MODULATING MOTOR        |
| (32) 18.09.2017                          | G05B 13/02                                    | CONTROL METHOD                     |
| (33) United States of America            | G06K 9/00                                     | (73) Oregon Tool, Inc.             |
| (51) A01D 41/16                          | G06K 9/62                                     | (72) Erickson, Noah                |
| (11) EP3398426                           | (11) EP3495570                                | Jones, Stephen                     |
| (21) EP18169485.2                        | (21) EP17903069.7                             | Ziring, Jonathan                   |
| (47) 07.07.2021                          | (47) 07.07.2021                               | (31) 201762500958 P                |
| (22) 26.04.2018                          | (87) JP2017039789                             | (32) 03.05.2017                    |
| (54) MULTILINK CONNECTION BETWEEN        | 04.10.2018                                    | (33) United States of America      |
| HARVESTING HEAD ADAPTER FRAME            | (22) 02.11.2017                               | (51) A01G 3/04                     |
| AND MAINFRAME                            | (54) DEVICE TO MONITOR AREA AROUND            | A01G 17/00                         |
| (73) Deere & Company                     | A WORKING MACHINE                             | A01G 17/02                         |
| (72) Brimeyer, Alex                      | (73) Hitachi Construction Machinery Co., Ltd. | (11) EP3595434                     |
| Taflinger, Eric                          | (72) KUOKAMI, Kazushige                       | (21) EP18708707.7                  |
| (31) 201715582757                        | SAKAMOTO, Hiroshi                             | (47) 07.07.2021                    |
| (32) 30.04.2017                          | MIZUOCHI, Mariko                              | (87) EP2018055935                  |
| (33) United States of America            | (31) 2017069559                               | 20.09.2018                         |
| (51) A01D 43/08                          | (32) 31.03.2017                               | (22) 09.03.2018                    |
| A01D 75/20                               | (33) Japan                                    | (54) MACHINE FOR AND METHOD OF     |
| (11) EP3644705                           | (51) A01D 89/00                               | EXTRACTING VINE BRANCHES           |
| (21) EP18728607.5                        | (11) EP3593623                                | (73) Andelfinger, Didier           |
| (47) 07.07.2021                          | (21) EP19172924.3                             | Dezé, Jean-Yves                    |
| (87) EP2018064157                        | (47) 07.07.2021                               | (72) Andelfinger, Didier           |
| 03.01.2019                               | (22) 07.05.2019                               | Dezé, Jean-Yves                    |
| (22) 30.05.2018                          | (54) HARVESTING MACHINE WITH A PICK           | (31) 17315002                      |
| (54) CONVEYING SYSTEM FOR                | UP DEVICE                                     | (32) 13.03.2017                    |
| CONVEYING AGRICULTURAL                   | (73) Usines Claas France S.A.S                | (33) European Patent Office (EPO)  |
| PRODUCE OR MATERIAL AND                  | (72) Batancourt, Grégory                      |                                    |



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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| (51) A01G 7/00<br>A01G 20/00<br>(11) EP3707990<br>(21) EP18884295.9<br>(47) 14.07.2021<br>(87) JP2018042425<br>06.06.2019<br>(22) 16.11.2018<br>(54) INFORMATION PROCESSING DEVICE,<br>INFORMATION PROCESSING<br>METHOD, AND VEGETATION<br>MANAGEMENT SYSTEM<br>(73) Sony Corporation<br>(72) KURIHARA, Kuniaki<br>ENARI, Masahiko<br>YOSHINOBU, Hitoshi<br>(31) 2017231793<br>(32) 01.12.2017<br>(33) Japan                                                                      | (54) SYSTEM AND METHOD FOR<br>BYPASSING HARVESTING FOR A<br>GROW POD<br>(73) Grow Solutions Tech LLC<br>(72) MILLAR, Gary Bret<br>STOTT, Mark Gerald<br>HURST, Michael Stephen<br>WOODBURY, Taylor John<br>(31) 201762519665 P<br>201762519661 P<br>201762519304 P<br>201815984663<br>(32) 14.06.2017<br>14.06.2017<br>14.06.2017<br>21.05.2018<br>(33) United States of America<br>United States of America<br>United States of America<br>United States of America | (32) 08.12.2016<br>(33) Ukraine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| (51) A01G 7/00<br>A23N 15/06<br>(11) EP3454637<br>(21) EP17721186.9<br>(47) 07.07.2021<br>(87) EP2017060994<br>16.11.2017<br>(22) 09.05.2017<br>(54) METHOD TO NATURALLY BRAND A<br>LETTUCE<br>(73) Signify Holding B.V.<br>(72) NICOLE, Céline Catherine Sarah<br>KRIJN, Marcellinus Petrus Carolus<br>Michael<br>VAN DER FELTZ, Gus<br>(31) 16168743<br>(32) 09.05.2016<br>(33) European Patent Office (EPO)                                                                    | (51) A01G 18/70<br>(11) EP3673726<br>(21) EP19217709.5<br>(47) 07.07.2021<br>(22) 18.12.2019<br>(54) SYSTEM FOR GROWING<br>MUSHROOMS<br>(73) Lemmen, Jacobus Alexander Jozef<br>Van Doremaele, Marcus Gerardus Maria<br>(72) Lemmen, Jacobus Alexander Jozef<br>Van Doremaele, Marcus Gerardus Maria<br>(31) 2022318<br>2023167<br>2024381<br>(32) 27.12.2018<br>20.05.2019<br>04.12.2019<br>(33) Netherlands<br>Netherlands<br>Netherlands                          | (32) 09.04.2014<br>09.04.2014<br>(33) United States of America<br>United States of America                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| (51) A01G 9/08<br>A01G 9/14<br>A01G 31/04<br>A01G 9/00<br>(11) EP3637989<br>(21) EP18730585.9<br>(47) 07.07.2021<br>(87) US2018033786<br>20.12.2018<br>(22) 22.05.2018<br>(54) METHOD AND SYSTEM FOR<br>TRACKING SEEDS<br>(73) Grow Solutions Tech LLC<br>(72) MILLAR, Gary Bret<br>(31) 201762519320 P<br>201762519660 P<br>201815983799<br>(32) 14.06.2017<br>14.06.2017<br>18.05.2018<br>(33) United States of America<br>United States of America<br>United States of America | (51) A01G 23/04<br>(11) EP3557977<br>(21) EP17825797.8<br>(47) 07.07.2021<br>(87) EP2017082993<br>28.06.2018<br>(22) 15.12.2017<br>(54) DEVICE FOR UNDERCUTTING AND<br>REMOVING ROOT BALLS<br>(73) Elsen, Freddy<br>(72) Elsen, Freddy<br>(31) 102016225917<br>(32) 21.12.2016<br>(33) Germany                                                                                                                                                                       | (31) 201461977430 P<br>201461977439 P<br>(32) 09.04.2014<br>09.04.2014<br>(33) United States of America<br>United States of America                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| Williams, Edward                       | (72) Torgerson, Kevin L.               | (33) Finland                            |
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| (21) EP18765867.9                      | (33) United States of America          | FEEDING POULTRY SUCH AS COCKS,          |
| (47) 14.07.2021                        | United States of America               | AND ANIMAL HOUSE PROVIDED WITH          |
| (87) EP2018073948                      | United States of America               | SAID FEEDING DEVICE                     |
| 14.03.2019                             | (51) A01K 1/00                         | (73) VDL Agrotech B.V.                  |
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| (54) METHOD FOR REDUCING THE           | (21) EP16187377.3                      | VAN DEN BROEK, Joost Johannes           |
| INDIVIDUAL-SPECIFIC MILK               | (47) 07.07.2021                        | Christianus                             |
| PRODUCTION OF MILK-PRODUCING           | (22) 06.09.2016                        | (31) 2019494                            |
| ANIMALS                                | (54) METHOD AND SYSTEM FOR             | (32) 06.09.2017                         |
| (73) GEA Farm Technologies GmbH        | OPERATING AT LEAST ONE GATE            | (33) Netherlands                        |
| (72) SCHMIDT, Susanne                  | (73) Nedap N.V.                        | (51) A01K 41/00                         |
| LINIUS, Brigitte                       | (72) Lammers, Rudie Jan Hendrik        | A01K 45/00                              |
| MAASSEN-FRANCKE, Beate                 | Gerritsen, Christoffel Petrus Albertus | A61D 19/00                              |
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| (51) A01J 5/007                        | (47) 14.07.2021                        | (54) DEVICES AND METHODS FOR            |
| A01K 1/00                              | (22) 18.09.2019                        | PROMOTING PRODUCTION OF                 |
| A01K 1/10                              | (54) DISPLACEMENT INSTALLATION, IN     | FEMALE EMBRYOS IN EGGS                  |
| A01K 1/12                              | PARTICULAR MANURE SLIDE, FOR A         | (73) N.R SOOS Technology Ltd.           |
| A01K 7/00                              | STALL                                  | (72) HAJ' NASHAT, Mohamad               |
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| (72) DE GROOT, Ester                   | (87) FR2016051834                      | (54) APPARATUS FOR REMOVING             |
| (31) 2012893                           | 09.02.2017                             | EGGS FROM EGG CARRIERS, AND             |
| (32) 27.05.2014                        | (22) 18.07.2016                        | ASSOCIATED METHOD                       |
| (33) Netherlands                       | (54) AUTONOMOUS FORAGE PUSHING         | (73) Zoetis Services LLC                |
| (51) A01J 5/017                        | VEHICLE                                | (72) SUH, William Dongwook              |
| A01K 1/12                              | (73) ALB Innovation                    | AGOSTINELLI, Scott Joseph               |
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| (73) Technologies Holdings Corporation | A01K 15/02                             | G01N 33/08                              |
| (72) VAN DER SLUIS, Peter Willem       | B68C 1/12                              | (11) EP3671207                          |
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| (54) VALVE BLOCK FOR A BACKFLUSHING    | (72) Hasanen, Pertti                   | TELFAH, Ahmad                           |
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| (11) EP3628152                        | METHOD OF OPERATING SUCH A               | (72) KURAMOTO, Kanya                       |
| (21) EP19000424.2                     | BOOM APPARATUS                           | KAWADA, Hitoshi                            |
| (47) 07.07.2021                       | (73) Kverneland Group Nieuw-Vennep BV    | (51) A01M 29/34                            |
| (22) 23.09.2019                       | (72) van der Krogt, René                 | A01G 7/06                                  |
| (54) HONEYCOMB FOR COMBATING          | (51) A01M 7/00                           | (11) EP3510864                             |
| VARROA MITES                          | (11) EP2837285                           | (21) EP19305016.8                          |
| (73) Jenter, Karl-Heinz               | (21) EP14179876.9                        | (47) 14.07.2021                            |
| (72) Jenter, Karl-Heinz               | (47) 07.07.2021                          | (22) 07.01.2019                            |
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| (32) 25.09.2018                       | (54) Spray-boom of an agricultural field | PLANTHOPPER LARVA                          |
| (33) Germany                          | sprayer                                  | (73) Université de Bourgogne               |
| (51) A01K 67/027                      | (73) Lemken GmbH & Co. KG                | Centre National de la Recherche            |
| C12Q 1/24                             | (72) Büsch, Johannes                     | Scientifique - CNRS                        |
| G01N 33/15                            | Böging, Michael                          | (72) ANSTETT, Marie-Charlotte              |
| G01N 33/50                            | Dibbern, Axel                            | (31) 1850207                               |
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| (73) AIMED BIO INC.                   | (21) EP16382439.4                        | 24.03.2016                                 |
| (72) NAM, Do Hyun                     | (47) 07.07.2021                          | (22) 17.09.2015                            |
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| (31) 20120143573                      | (54) SMOKE GENERATOR CONTAINER           | METHODS                                    |
| (32) 11.12.2012                       | FOR APPLYING PHYTOSANITARY               | (73) Genzyme Corporation                   |
| (33) Korea (Republic)                 | PRODUCTS AND/OR FOOD                     | (72) JIN, Xiaoxia                          |
| (51) A01K 67/033                      | ADDITIVES ON FRUITS AND                  | BUSER, Claudia                             |
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| A01M 1/10                             | SMOKE GENERATOR CONTAINERS               | (32) 18.09.2014                            |
| A01M 1/20                             | AND MANUFACTURING METHOD                 | (33) United States of America              |
| (11) EP3504965                        | (73) Fomesa Fruitech, S.L.               | (51) A01N 1/02                             |
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| (47) 07.07.2021                       | García Breijo, Eduardo                   | (11) EP3448151                             |
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| (73) Macadar Angier, Victor Alejandro | (51) A01M 21/04                          | (22) 31.03.2017                            |
| (72) Macadar Angier, Victor Alejandro | (11) EP3616511                           | (54) METHOD AND DEVICE FOR THE             |
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| (47) 07.07.2021                       | WEEDS BY APPLICATION OF A HIGH           | der angewandten Forschung e.V.             |
| (22) 18.05.2017                       | TEMPERATURE FLUID                        | (72) FUHR, Günter R.                       |
| (54) SINGLE-BEARING FISHING REEL      | (73) Heatweed Technologies AS            | ZIMMERMANN, Heiko                          |
| (73) Shimano Inc.                     | (72) Van de Haar, Hendrik                | (31) 102016005075                          |
| Shimano Components (Malaysia) SDN.    | Van Hensbergen, Jan                      | (32) 27.04.2016                            |
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| (72) MISSERI, Muhamad Aidil Bin       | (32) 29.08.2018                          | (51) A01N 3/00                             |
| LEE, Wen Yin                          | (33) Netherlands                         | A01N 3/04                                  |
| KITAJIMA, Keigo                       | (51) A01M 29/12                          | A01N 25/00                                 |
| CHEW, Chun Wee                        | A01K 1/03                                | A01N 25/10                                 |
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| (72) DHONUKSHE, Pankaj Bacharam DÜMMEN, Tobias Günter                                                                            | (47) 14.07.2021                           | (73) Eberhard Karls Universität Tübingen                                                                               |
| VAN DEN HEUVEL, Johannes Franciscus Johanna Maria                                                                                | (87) US2016055952                         | (72) SCHAAF, Gabriel                                                                                                   |
| (31) 2014879                                                                                                                     | 20.04.2017                                | LAHA, Debabrata                                                                                                        |
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| (51) A01N 25/00                                                                                                                  | (73) Pioneer Hi-Bred International, Inc.  | JOHNEN, Philipp                                                                                                        |
| A01P 13/02                                                                                                                       | E. I. du Pont de Nemours and Company      | VAN WEES, Saskia, C., M.                                                                                               |
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| (73) Bayer CropScience Aktiengesellschaft                                                                                        | (33) United States of America             | A01N 43/56                                                                                                             |
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| Donn, Günter                                                                                                                     | A01N 37/50                                | A01N 43/90                                                                                                             |
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| A01P 7/00                                                                                                                        | 21.06.2018                                | (72) KASHIMA Takayuki                                                                                                  |
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| (54) AGROCHEMICAL COMPOSITION AND DISPERSAL METHOD THEREFOR                                                                      | ES-SAYED, Mazen                           | A01N 43/60                                                                                                             |
| (73) Kumiai Chemical Industry Co., Ltd.                                                                                          | GÖRTZ, Andreas                            | A01N 43/653                                                                                                            |
| (72) OHTA Yuichiro                                                                                                               | WACHENDORFF-NEUMANN, Ulrike               | A01N 43/78                                                                                                             |
| YAMAZAKI Toshinobu                                                                                                               | (31) 16204160                             | A01N 43/80                                                                                                             |
| (31) 2015234180                                                                                                                  | (32) 14.12.2016                           | C07D 231/12                                                                                                            |
| (32) 30.11.2015                                                                                                                  | (33) European Patent Office (EPO)         | C07D 401/10                                                                                                            |
| (33) Japan                                                                                                                       | (51) A01N 31/02                           | C07D 401/12                                                                                                            |
| (51) A01N 25/22                                                                                                                  | A01N 37/44                                | C07D 403/12                                                                                                            |
| A01N 37/36                                                                                                                       | A61L 29/16                                | C07D 413/12                                                                                                            |
| A61L 2/22                                                                                                                        | (11) EP3426313                            | C07D 417/12                                                                                                            |
| (11) EP3413712                                                                                                                   | (21) EP17715286.5                         | C07D 487/04                                                                                                            |
| (21) EP17708431.6                                                                                                                | (47) 07.07.2021                           | (11) EP3615523                                                                                                         |
| (47) 07.07.2021                                                                                                                  | (87) IN2017000052                         | (21) EP18722013.2                                                                                                      |
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| 17.08.2017                                                                                                                       | (22) 28.02.2017                           | (87) EP2018060928                                                                                                      |
| (22) 08.02.2017                                                                                                                  | (54) BROAD SPECTRUM                       | 01.11.2018                                                                                                             |
| (54) DISINFECTION AGENT                                                                                                          | ANTIMICROBIAL&ANTICOAGULANT COMPOSITION   | (22) 27.04.2018                                                                                                        |
| (73) Mavena International AG                                                                                                     | (73) AGGARWAL, Dinesh                     | (54) HETEROARYLPHENYLAMINOQUINOLINES AND ANALOGUES                                                                     |
| (72) REICHWAGEN, Sven                                                                                                            | (72) AGGARWAL, Dinesh                     | (73) Bayer Aktiengesellschaft                                                                                          |
| (31) 102016102463                                                                                                                | (31) 201621007809                         | Bayer CropScience Aktiengesellschaft                                                                                   |
| (32) 12.02.2016                                                                                                                  | (32) 07.03.2016                           | (72) CRISTAU, Pierre                                                                                                   |
| (33) Germany                                                                                                                     | (33) India                                | DESBORDES, Philippe                                                                                                    |
| (51) A01N 25/30                                                                                                                  | (51) A01N 31/06                           | DUFOUR, Jérémy                                                                                                         |
| A01N 63/00                                                                                                                       | C12N 15/82                                | DUBOST, Christophe                                                                                                     |
|                                                                                                                                  | (11) EP3218500                            | MILLET, Anthony                                                                                                        |
|                                                                                                                                  | (21) EP15831125.8                         | NAUD, Sébastien                                                                                                        |
|                                                                                                                                  | (47) 07.07.2021                           |                                                                                                                        |
|                                                                                                                                  | (87) DE2015000534                         |                                                                                                                        |
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| TOQUIN, Valérie                         | (21) EP17727851.2                     | 13163855                                 |
| LEMPEREUR, Virginie                     | (47) 14.07.2021                       | 13169224                                 |
| VILLALBA, François                      | (87) EP2017062795                     | 13188962                                 |
| RINOLFI, Philippe                       | 07.12.2017                            | (32) 01.02.2013                          |
| LOQUE, Dominique                        | (22) 26.05.2017                       | 16.04.2013                               |
| WACHENDORFF-NEUMANN, Ulrike             | (54) FUNGICIDAL COMPOSITIONS          | 24.05.2013                               |
| (31) 17290056                           | (73) Syngenta Participations AG       | 16.10.2013                               |
| (32) 27.04.2017                         | (72) FORSTER, Birgit                  | (33) European Patent Office (EPO)        |
| (33) European Patent Office (EPO)       | GRASSO, Valeria                       | European Patent Office (EPO)             |
| (51) A01N 43/50                         | (31) 201609574                        | European Patent Office (EPO)             |
| A01N 47/06                              | (32) 01.06.2016                       | European Patent Office (EPO)             |
| A01N 47/34                              | (33) United Kingdom                   |                                          |
| A01P 1/00                               | (51) A01N 43/58                       | (51) A22B 5/00                           |
| A01P 3/00                               | A01N 43/90                            | A22B 7/00                                |
| A61K 31/4164                            | A01N 47/06                            | A22C 15/00                               |
| A61K 31/787                             | C07D 401/04                           | A22C 17/00                               |
| A61P 31/00                              | C07D 401/10                           | A22C 21/00                               |
| C07D 233/61                             | C07D 405/10                           | (11) EP3545769                           |
| C08G 73/06                              | C07D 409/04                           | (21) EP18864870.3                        |
| C08L 79/04                              | C07D 409/10                           | (47) 07.07.2021                          |
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| (47) 14.07.2021                         | (21) EP16795188.8                     | (22) 05.10.2018                          |
| (87) SG2018050315                       | (47) 14.07.2021                       | (54) SYSTEM FOR LOADING LEG MEAT ON      |
| 03.01.2019                              | (87) US2016058762                     | THE BONE                                 |
| (22) 28.06.2018                         | 04.05.2017                            | (73) Mayekawa Mfg. Co., Ltd.             |
| (54) DEGRADABLE IMIDAZOLIUM             | (22) 26.10.2016                       | (72) CHIMURA, Takeshi                    |
| OLIGOMER AND POLYMER FOR                | (54) NOVEL PYRIDAZINONE HERBICIDES    | USUI, Hiroyuki                           |
| ANTIMICROBIAL APPLICATIONS              | (73) FMC Corporation                  | UMEHARA, Takekuni                        |
| (73) Agency for Science, Technology and | (72) STEVENSON, Thomas Martin         | GOTO, Osamu                              |
| Research                                | SELBY, Thomas Paul                    | AKABANE, Hajime                          |
| (72) ZHANG, Yugen                       | MARCUS, Kimberly Katherine            | KURATANI, Yuuichi                        |
| YUAN, Yuan                              | (31) 201562247585 P                   | (31) 2017195872                          |
| LIM, Shu Wen Diane                      | (32) 28.10.2015                       | (32) 06.10.2017                          |
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| (32) 30.06.2017                         | (51) A21B 3/04                        |                                          |
| (33) Singapore                          | F24C 7/08                             | (51) A22C 25/16                          |
| (51) A01N 43/54                         | G05D 23/19                            | (11) EP3409125                           |
| C07D 213/75                             | (11) EP3621441                        | (21) EP17173278.7                        |
| C07D 401/04                             | (21) EP18721815.1                     | (47) 07.07.2021                          |
| C07D 401/12                             | (47) 07.07.2021                       | (22) 29.05.2017                          |
| C07D 401/14                             | (87) EP2018061930                     | (54) APPARATUS FOR CUTTING FISH          |
| (11) EP3464261                          | 15.11.2018                            | FILLETS FROM FLANK BONES,                |
| (21) EP17724093.4                       | (22) 08.05.2018                       | FILLETING APPARATUS WITH SUCH            |
| (47) 07.07.2021                         | (54) METHOD FOR CONTROLLING A         | AN APPARATUS, AND METHOD FOR             |
| (87) EP2017062262                       | COOKING PROCESS IN A COOKING          | CUTTING FISH FILLETS FROM FLANK          |
| 30.11.2017                              | OVEN                                  | BONES                                    |
| (22) 22.05.2017                         | (73) Electrolux Appliances Aktiebolag | (73) Nordischer Maschinenbau Rud. Baader |
| (54) HERBICIDAL URACILPYRID             | (72) BRENN, Reiner                    | GmbH + Co. KG                            |
| (73) BASF SE                            | SPECHT, Trevor                        | (72) Jürs, Michael                       |
| (72) SEISER, Tobias                     | LY, Chan-Thoeurn                      | Schroeder, Matthias                      |
| WITSCHER, Matthias                      | (31) 17169852                         |                                          |
| JOHANNES, Manuel                        | (32) 08.05.2017                       | (51) A23B 4/14                           |
| MASSA, Dario                            | (33) European Patent Office (EPO)     | A23B 7/14                                |
| PARRA RAPADO, Liliana                   | (51) A21C 5/00                        | A23B 9/16                                |
| APONTE, Raphael                         | A22C 7/00                             | A23L 19/00                               |
| MIETZNER, Thomas                        | B29C 31/00                            | A23L 27/00                               |
| NEWTON, Trevor William                  | (11) EP3639668                        | (11) EP3209135                           |
| SEITZ, Thomas                           | (21) EP19206837.7                     | (21) EP15785006.6                        |
| EVANS, Richard R                        | (47) 14.07.2021                       | (47) 07.07.2021                          |
| LANDES, Andreas                         | (22) 03.02.2014                       | (87) US2015055064                        |
| (31) 16171063                           | (54) FOOD FORMING DRUM                | 28.04.2016                               |
| (32) 24.05.2016                         | (73) GEA Food Solutions Bakel B.V.    | (22) 12.10.2015                          |
| (33) European Patent Office (EPO)       | (72) VAN GERWEN, Hendrikus Petrus     | (54) METHOD FOR PROVIDING                |
| (51) A01N 43/56                         | Gerardus                              | PRESERVED CUT FRESH PRODUCE              |
| A01N 43/58                              | SCHOENMAKERS, Petrus Hubertus         | WITH TRUE-TO-NATURE FLAVOR               |
| A01P 3/00                               | Maria                                 | (73) NatureSeal, Inc.                    |
|                                         |                                       | (72) SANTOS, Stephen A.                  |
|                                         |                                       | SOBEL, Robert M.                         |
|                                         |                                       | (31) 201462068385 P                      |

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| (32) 24.10.2014                      | (22) 12.01.2018                                | (87) SE2014051480                          |
| 17.09.2015                           | (54) STERILE FILTERED LACTASE                  | 18.06.2015                                 |
| (33) United States of America        | PREPARATION COMPRISING SALT                    | (22) 10.12.2014                            |
| United States of America             | WITH MONOVALENT CATION AND                     | (54) HEAT STABLE CHOCOLATE                 |
| (51) A23B 7/005                      | PREPARATION THEREOF                            | (73) AAK AB (Publ)                         |
| A23B 7/06                            | (73) Novozymes A/S                             | (72) ANDERSEN, Morten Daugaard             |
| A23B 7/10                            | (72) HOBEL, Cédric                             | (31) 1351477                               |
| A23B 7/155                           | JENSEN, Karen                                  | (32) 10.12.2013                            |
| A23L 3/015                           | (31) 17151473                                  | (33) Sweden                                |
| A23L 3/3508                          | 17173248                                       | (51) A23G 3/26                             |
| A23L 3/3571                          | (32) 13.01.2017                                | A23G 3/34                                  |
| A23L 19/00                           | 29.05.2017                                     | B01J 2/00                                  |
| (11) EP3028582                       | (33) European Patent Office (EPO)              | B05B 13/02                                 |
| (21) EP14832766.1                    | European Patent Office (EPO)                   | B05C 19/02                                 |
| (47) 07.07.2021                      | (51) A23D 9/00                                 | (11) EP3618637                             |
| (87) KR2014003616                    | A23D 9/02                                      | (21) EP18727429.5                          |
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| (22) 24.04.2014                      | A23G 3/00                                      | (87) IB2018053027                          |
| (54) METHOD FOR PRODUCING            | C11C 3/12                                      | 08.11.2018                                 |
| VEGETABLE PRODUCTS USING             | (11) EP1490463                                 | (22) 02.05.2018                            |
| ULTRA HIGH PRESSURE                  | (21) EP03711720.7                              | (54) APPARATUS AND METHOD FOR              |
| (73) Cj Cheiljedang Corporation      | (47) 14.07.2021                                | COATING BULK MATERIAL                      |
| (72) MOON, Sang Young                | (87) BE2003000055                              | (73) I.M.A. Industria Macchine Automatiche |
| KANG, Dae Ik                         | 02.10.2003                                     | S.p.A.                                     |
| KIM, Sung Kyun                       | (22) 26.03.2003                                | (72) GANDOLFI, Nicola                      |
| CHO, Won Il                          | (54) LOW-TRANS FATS FOR                        | DARRAGJATI, Gjergj                         |
| CHOI, Su Hee                         | CONFECTIONERY AND BAKERY FAT                   | (31) 201700047403                          |
| (31) 20130091017                     | COMPOSITIONS                                   | (32) 03.05.2017                            |
| (32) 31.07.2013                      | (73) Fuji Oil Europe                           | (33) Italy                                 |
| (33) Korea (Republic)                | (72) CLEENEWERCK, Bernard                      | (51) A23G 3/26                             |
| (51) A23C 3/00                       | SAEY, Karen                                    | B01J 2/00                                  |
| A23C 3/02                            | VAN DYCK, Marij                                | B05B 13/02                                 |
| A23C 9/13                            | (31) PCT/BE02/00045                            | B05C 19/02                                 |
| A23C 9/152                           | (32) 26.03.2002                                | (11) EP3618973                             |
| A23C 21/08                           | (33) World Intellectual Property Office (WIPO) | (21) EP18724336.5                          |
| A23G 1/48                            | (51) A23D 9/007                                | (47) 07.07.2021                            |
| A23G 1/56                            | B65D 81/34                                     | (87) IB2018053022                          |
| A23L 2/44                            | A23L 5/10                                      | 08.11.2018                                 |
| A23L 2/52                            | A23L 13/00                                     | (22) 02.05.2018                            |
| A23L 3/00                            | A23L 13/40                                     | (54) APPARATUS AND METHOD FOR              |
| A23L 29/206                          | A23L 13/50                                     | COATING BULK MATERIAL                      |
| A23L 29/238                          | A23L 13/60                                     | (73) I.M.A. Industria Macchine Automatiche |
| A23L 33/105                          | A23L 17/00                                     | S.p.A.                                     |
| (11) EP3672428                       | A23L 19/00                                     | (72) GANDOLFI, Nicola                      |
| (21) EP18755834.1                    | A23L 27/00                                     | DARRAGJATI, Gjergj                         |
| (47) 07.07.2021                      | A23L 27/10                                     | (31) 201700047415                          |
| (87) EP2018072795                    | A23P 10/10                                     | (32) 03.05.2017                            |
| 28.02.2019                           | A23P 10/35                                     | (33) Italy                                 |
| (22) 23.08.2018                      | A23P 20/10                                     | (51) A23G 3/36                             |
| (54) PREVENTING PHYSICAL INSTABILITY | A23P 20/18                                     | A23G 3/48                                  |
| OF HEAT TREATED DAIRY BASED          | (11) EP3672416                                 | A23G 4/00                                  |
| PRODUCTS                             | (21) EP18742819.8                              | A61K 8/44                                  |
| (73) Arla Foods Amba                 | (47) 14.07.2021                                | A61K 31/223                                |
| (72) LUND NISSEN, Marianne           | (87) EP2018070263                              | A61K 36/575                                |
| RAY, Colin Andrew                    | 28.02.2019                                     | A61P 1/02                                  |
| RAUH, Valentin                       | (22) 26.07.2018                                | A61Q 11/00                                 |
| WÆHRENS STOLZENBACH, Sandra          | (54) SEASONING PRODUCT                         | A61K 8/9789                                |
| (31) 17187502                        | (73) Société des Produits Nestlé S.A.          | (11) EP3347005                             |
| (32) 23.08.2017                      | (72) KIM, Youngbin                             | (21) EP16778142.6                          |
| (33) European Patent Office (EPO)    | PERDANA, Jimmy                                 | (47) 07.07.2021                            |
| (51) A23C 9/12                       | (31) 17187920                                  | (87) US2016051311                          |
| C12N 9/24                            | (32) 25.08.2017                                | 16.03.2017                                 |
| C12N 9/38                            | (33) European Patent Office (EPO)              | (22) 12.09.2016                            |
| (11) EP3568023                       | (51) A23G 1/30                                 | (54) SYNERGISTIC ANTIBACTERIAL             |
| (21) EP18702108.4                    | A23G 1/36                                      | EFFECTS OF MAGNOLIA BARK                   |
| (47) 07.07.2021                      | (11) EP3079487                                 | EXTRACT AND L-ARGININE, N-ALPHA-           |
| (87) EP2018050758                    | (21) EP14870372.1                              |                                            |

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| (73) Wm. Wrigley Jr. Company           | (32) 26.08.2016                         | (72) BOER, Viktor, Marius       |
| (72) DODDS, Michael W.                 | (33) Japan                              | ZWARTJENS, Priscilla            |
| TIAN, Minmin                           | (51) A23L 2/02                          | VAN DEN BERG, Eric              |
| INUI, Taichi                           | A23L 19/00                              | (31) 201562204702 P             |
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| (51) A23G 4/06                         | (54) METHOD OF PROCESSING TOMATO        | (21) EP15856493.0               |
| A61Q 11/00                             | (73) Agrinatura Società Agricola S.r.l. | (47) 14.07.2021                 |
| A23L 27/00                             | (72) CECI, Giancarlo                    | (87) US2015058621               |
| A23L 27/20                             | (31) 201800003068                       | 12.05.2016                      |
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| (21) EP16725776.5                      | (33) Italy                              | (54) EFFECTIVE PLANT PROTEIN    |
| (47) 14.07.2021                        | (51) A23L 2/04                          | DRINK STABILIZERS COMPRISING    |
| (87) EP2016060127                      | A47J 27/04                              | COLLOIDAL MICROCRYSTALLINE      |
| 09.11.2017                             | A47J 27/086                             | CELLULOSE MADE FROM NON-        |
| (22) 05.05.2016                        | A47J 27/092                             | DISSOLVING CELLULOSE PULP       |
| (54) COOLANT MIXTURES                  | (11) EP3154402                          | (73) DuPont Nutrition USA, Inc. |
| (73) Symrise AG                        | (21) EP15729552.8                       | (72) RUSZKAY, Tom               |
| (72) SIEGEL, Sven                      | (47) 07.07.2021                         | TAN, Zheng                      |
| MACHINEK, Arnold                       | (87) FR2015051454                       | LYNCH, Maurice Gerard           |
| HÖLSCHER, Bernd                        | 17.12.2015                              | TSAL, Albert                    |
| (51) A23J 1/10                         | (22) 02.06.2015                         | TOH, Joyce                      |
| A23J 3/30                              | (54) DEVICE AND METHOD FOR              | AGARWAL, Parminder              |
| C08H 1/06                              | EXTRACTING JUICE FROM FOOD              | (31) 201462074322 P             |
| A23L 33/17                             | (73) SEB S.A.                           | (32) 03.11.2014                 |
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| (47) 14.07.2021                        | (32) 10.06.2014                         | B65B 3/04                       |
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| (22) 29.07.2014                        | A23L 2/60                               | (21) EP17850336.3               |
| (54) METHOD FOR PRODUCING              | C07D 417/12                             | (47) 14.07.2021                 |
| HYDROLYSED KERATINACEOUS               | C07D 417/14                             | (87) ES2017070603               |
| MATERIAL                               | A23L 27/00                              | 22.03.2018                      |
| (73) Tessenderlo Group NV              | A23L 29/30                              | (22) 08.09.2017                 |
| (72) FILLIÈRES, Romain                 | (11) EP3593648                          | (54) METHOD FOR PACKAGING FOOD  |
| BLUTEL, Philippe                       | (21) EP19193966.9                       | CAPSULES AND PACKAGED FOOD      |
| (31) 13178511                          | (47) 14.07.2021                         | PRODUCT PRODUCED BY MEANS OF    |
| 201361881537 P                         | (22) 05.08.2013                         | SAME                            |
| 14163922                               | (54) SWEET FLAVOR MODIFIER              | (73) Caviaroli, S.L.            |
| (32) 30.07.2013                        | (73) Firmenich Incorporated             | (72) RAMON REAL, Ramon          |
| 24.09.2013                             | (72) TACHDJIAN, Catherine               | RAMON FERRERES, Ramon Maria     |
| 08.04.2014                             | KARANEWSKY, Donald                      | (31) 201631199                  |
| (33) European Patent Office (EPO)      | WERNER, Sara                            | (32) 16.09.2016                 |
| United States of America               | DARMOHUSODO, Vincent                    | (33) Spain                      |
| European Patent Office (EPO)           | YAMAMOTO, Jeff                          | (51) A23L 3/04                  |
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| (47) 14.07.2021                        | (51) A23L 2/60                          | (54) SYSTEM AND METHOD FOR      |
| (87) JP2017030565                      | C07K 14/39                              | PASTEURIZING FOODS              |
| 01.03.2018                             | C12N 1/16                               | (73) Red Bull GmbH              |
| (22) 25.08.2017                        | C12P 15/00                              | (72) CONCIN, Roland             |
| (54) RUMINANT FEED                     | C12P 19/56                              | (31) 508222015                  |
| (73) Nippon Paper Industries Co., Ltd. | (11) EP3334752                          | (32) 29.09.2015                 |
| (72) MINOHARA, Taisuke                 | (21) EP16763453.4                       | (33) Austria                    |
| SATO, Kana                             | (47) 07.07.2021                         | (51) A23L 29/00                 |
| SHINKURA, Hiroshi                      | (87) EP2016069356                       | A23L 29/10                      |
| KUROSU, Kazuhiro                       | 16.02.2017                              | (11) EP3684198                  |
| IIMORI, Takeshi                        | (22) 15.08.2016                         | (21) EP19708712.5               |
|                                        | (54) STEVIOL GLYCOSIDE TRANSPORT        | (47) 14.07.2021                 |

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| (22) 12.02.2019                                                                               | (87) US2017019825<br>14.09.2017                                                                                                             | A41D 13/015                                                                                                                                                                                                                                                                                                                                   |
| (54) FOAM CONTROL                                                                             | (22) 28.02.2017                                                                                                                             | A41D 31/06                                                                                                                                                                                                                                                                                                                                    |
| (73) DOW GLOBAL TECHNOLOGIES LLC                                                              | (54) HOOKAH                                                                                                                                 | (11) EP3397098                                                                                                                                                                                                                                                                                                                                |
| (72) CUMMINS, Clark H.<br>KING, Stephen W.<br>CHEN, Xue<br>TULCHINSKY, Michael L.             | (73) MYA Saray, LLC<br>(72) MEHIO, Nizar Youssef<br>(31) 201615063503<br>(32) 07.03.2016<br>(33) United States of America                   | (21) EP15912185.4<br>(47) 14.07.2021<br>(87) US2015068031<br>06.07.2017<br>(22) 30.12.2015                                                                                                                                                                                                                                                    |
| (31) 201862644031 P<br>(32) 16.03.2018<br>(33) United States of America                       | (51) A24F 1/30<br>A24F 40/10<br>A24F 40/42<br>A24F 40/46<br>A24F 40/51                                                                      | (54) EMERGENCY ANTI-HYPOTHERMIA<br>SYSTEM AND HIGHLY PORTABLE,<br>INFLATABLE EMERGENCY VEST<br>THEREFOR                                                                                                                                                                                                                                       |
| (51) A23L 33/00<br>A23L 33/135                                                                | (11) EP3192381<br>(21) EP16151486.4<br>(47) 14.07.2021                                                                                      | (73) XEROGEAR, LLC<br>(72) BRUCE, Ian<br>(31) 201514979943<br>(32) 28.12.2015<br>(33) United States of America                                                                                                                                                                                                                                |
| (11) EP3328215<br>(21) EP16831011.8<br>(47) 07.07.2021<br>(87) US2016041428<br>02.02.2017     | (22) 15.01.2016<br>(54) ELECTRONIC VAPING DEVICE WITH A<br>PLURALITY OF HEATING ELEMENTS                                                    | (51) A41D 13/05<br>A41D 13/06<br>A41D 31/00                                                                                                                                                                                                                                                                                                   |
| (22) 08.07.2016<br>(54) STABLE DRY PROBIOTIC<br>COMPOSITIONS FOR SPECIAL<br>DIETARY USES      | (73) Fontem Holdings 1 B.V.<br>(72) Borkovec, Vaclav<br>Biel, Stefan                                                                        | (11) EP3352600<br>(21) EP15777893.7<br>(47) 07.07.2021                                                                                                                                                                                                                                                                                        |
| (73) Advanced BioNutrition Corp.<br>(72) KESHTMAND, Majid<br>HAREL, Mordechai<br>RICE, Trisha | (51) A24F 40/46<br>A24F 40/70<br>A24F 47/00                                                                                                 | (87) EP2015071900<br>30.03.2017<br>(22) 23.09.2015                                                                                                                                                                                                                                                                                            |
| (31) 201562198220 P<br>(32) 29.07.2015<br>(33) United States of America                       | (11) EP3180998<br>(21) EP17155056.9<br>(47) 07.07.2021                                                                                      | (54) IMPROVED SAW PROTECTION<br>(73) Husqvarna AB<br>(72) MILLING, Johan                                                                                                                                                                                                                                                                      |
| (51) A24C 5/32<br>A24C 5/35<br>B65B 19/04<br>B65B 35/34<br>B65B 35/44<br>B65G 15/14           | (22) 17.12.2013<br>(54) HEATING ASSEMBLY FOR AN<br>AEROSOL GENERATING SYSTEM                                                                | (51) A41D 13/12<br>A41D 27/24<br>B29C 65/00<br>B29C 65/02<br>B29C 65/08<br>B29C 65/18<br>B29C 65/38<br>B29C 65/82<br>B29L 31/48<br>B32B 5/02<br>B32B 5/08<br>B32B 7/14<br>B32B 27/02<br>B32B 27/12<br>B32B 27/34<br>B32B 27/36<br>B32B 33/00<br>B32B 37/04<br>B32B 37/06<br>B32B 37/10<br>B32B 37/12<br>B32B 37/15<br>A61B 46/00<br>B32B 7/02 |
| (11) EP3678942<br>(21) EP18782511.2<br>(47) 14.07.2021<br>(87) IB2018056801<br>14.03.2019     | (31) 12275223<br>(32) 28.12.2012<br>(33) European Patent Office (EPO)                                                                       | (11) EP3492260<br>(21) EP16910233.2<br>(47) 14.07.2021<br>(87) CN2016093908<br>01.02.2018                                                                                                                                                                                                                                                     |
| (22) 06.09.2018<br>(54) HOPPER FOR SMOKING ARTICLES                                           | (51) A24F 40/48<br>A24F 40/57                                                                                                               | (22) 08.08.2016                                                                                                                                                                                                                                                                                                                               |
| (73) G.D Società per Azioni<br>(72) FORTINI, Massimo<br>VILLA, Stefano<br>FEDERICI, Luca      | (11) EP3536177<br>(21) EP18160479.4<br>(47) 14.07.2021<br>(22) 07.03.2018                                                                   | (54) LIQUID-IMPERMEABLE STITCHING<br>METHOD FOR SEAM OF VAPOR-<br>PERMEABLE VIRUS-BARRIER FABRIC                                                                                                                                                                                                                                              |
| (31) 201700099670<br>(32) 06.09.2017<br>(33) Italy                                            | (54) ELECTRONIC SMOKING DEVICE WITH<br>LIQUID PUMP                                                                                          | (73) Foshan King Wonder Hi-tech Co., Ltd.<br>(72) LIN, Yuwei<br>WU, Yaogen                                                                                                                                                                                                                                                                    |
| (51) A24C 5/34<br>A24D 3/02                                                                   | (73) Fontem Holdings 1 B.V.<br>(72) Wensley, Martin                                                                                         | (31) 201610601282<br>(32) 27.07.2016                                                                                                                                                                                                                                                                                                          |
| (11) EP3238552<br>(21) EP14909081.3<br>(47) 14.07.2021<br>(87) JP2014084599<br>30.06.2016     | (51) A41C 3/00<br>A41C 5/00<br>(11) EP3261469<br>(21) EP16707229.7<br>(47) 07.07.2021<br>(87) IB2016051042<br>01.09.2016<br>(22) 25.02.2016 |                                                                                                                                                                                                                                                                                                                                               |
| (22) 26.12.2014<br>(54) FILTER INSPECTION APPARATUS                                           | (54) BRA ADAPTED FOR ATHLETIC USE                                                                                                           |                                                                                                                                                                                                                                                                                                                                               |
| (73) Japan Tobacco Inc.<br>Hakko Automation Co., Ltd.                                         | (73) Hanes Operations Europe SAS<br>(72) BLIBECH, Ragheb                                                                                    |                                                                                                                                                                                                                                                                                                                                               |
| (72) KIDA, Shinzo<br>NAKAMURA, Satoshi<br>ISHIDA, Naoki<br>KOREEDA, Yuichi                    | (31) 1551627<br>(32) 25.02.2015<br>(33) France                                                                                              |                                                                                                                                                                                                                                                                                                                                               |
| (51) A24F 1/30<br>(11) EP3426066<br>(21) EP17710651.5                                         | (51) A41D 1/04<br>A41D 13/002                                                                                                               |                                                                                                                                                                                                                                                                                                                                               |



|                                            |                                      |                                      |
|--------------------------------------------|--------------------------------------|--------------------------------------|
| (33) China                                 | B32B 27/12                           | A43D 8/22                            |
| (51) A41D 19/00                            | B32B 27/16                           | A43D 95/14                           |
| A41D 19/01                                 | B32B 27/28                           | B41J 3/407                           |
| A41D 27/10                                 | B32B 27/30                           | B41M 1/40                            |
| (11) EP3568030                             | B32B 27/34                           | B41M 5/382                           |
| (21) EP18702397.3                          | (11) EP3065585                       | (11) EP3586666                       |
| (47) 07.07.2021                            | (21) EP14824380.1                    | (21) EP19177955.2                    |
| (87) US2018013437                          | (47) 14.07.2021                      | (47) 14.07.2021                      |
| 19.07.2018                                 | (87) EP2014073373                    | (22) 25.11.2014                      |
| (22) 12.01.2018                            | 07.05.2015                           | (54) ARTICLE WITH COLORING LAYER     |
| (54) LAYERED THUMBHOLE STRUCTURE           | (22) 30.10.2014                      | AND CONTROL SURFACE LAYER            |
| (73) Nike Innovate C.V.                    | (54) MULTILAYER WEB, IN PARTICULAR   | (73) NIKE Innovate C.V.              |
| (72) HORNER, Stewart D.                    | FOR MULTILAYER FABRIC WEBS,          | (72) DOREMUS, Harleigh               |
| KOSHKAROFF, Iustinia                       | PARTICULARLY FOR PROTECTIVE          | JONES, David P.                      |
| NORDSTROM, Matthew D.                      | CLOTHING                             | LARSON, Ryan R.                      |
| SKORUPSKI, Derek                           | (73) Tesimax - Altinger GmbH         | MILLER, Todd W.                      |
| (31) 201715404957                          | (72) OVERKAMP, Andre                 | (31) 201414160732                    |
| (32) 12.01.2017                            | WEBER, Thomas                        | (32) 22.01.2014                      |
| (33) United States of America              | GERLACH, Torsten                     | (33) United States of America        |
| (51) A41D 19/015                           | EGNER, Sabine                        | (51) A43B 1/04                       |
| A41H 1/02                                  | (31) 102013222331                    | A43B 5/06                            |
| A61F 2/12                                  | 102014222114                         | A43B 9/00                            |
| F41H 5/04                                  | (32) 04.11.2013                      | A43B 13/14                           |
| (11) EP2706956                             | 29.10.2014                           | A43B 13/18                           |
| (21) EP12721660.4                          | (33) Germany                         | A43B 23/02                           |
| (47) 07.07.2021                            | Germany                              | (11) EP3603435                       |
| (87) US2012037319                          | (51) A42B 3/04                       | (21) EP19198694.2                    |
| 15.11.2012                                 | A61B 5/00                            | (47) 14.07.2021                      |
| (22) 10.05.2012                            | A61B 5/11                            | (22) 27.01.2016                      |
| (54) INFLATABLE PROSTHESES                 | (11) EP3338631                       | (54) SHOE, IN PARTICULAR A SPORTS    |
| (73) ALLERGAN, INC.                        | (21) EP17206783.7                    | SHOE                                 |
| (72) MANESIS, Nicholas J.                  | (47) 14.07.2021                      | (73) adidas AG                       |
| CHITRE, Kaustubh S.                        | (22) 15.07.2011                      | (72) WARDLAW, Angus                  |
| TRILOKEKAR, Nikhil S.                      | (54) DETECTION AND                   | COONROD, Zachary Clinton             |
| LESLIE, Dustin B.                          | CHARACTERIZATION OF HEAD             | TARRIER, James                       |
| SCHUESSLER, David J.                       | IMPACTS                              | SCHLARB, Heiko                       |
| (31) 201113105715                          | (73) The Cleveland Clinic Foundation | SMITH, Paul Leonard Michael          |
| (32) 11.05.2011                            | (72) BENZEL, Edward C.               | FREEMAN, Warren                      |
| (33) United States of America              | MIELE, Vincent J.                    | (31) 102015206486                    |
| (51) A41D 27/08                            | BARTSCH, Adam J.                     | (32) 10.04.2015                      |
| A41D 27/24                                 | GILBERTSON, Lars G.                  | (33) Germany                         |
| C09J 5/06                                  | (31) 364639 P                        | (51) A43B 3/00                       |
| C09J 7/35                                  | 201161444281 P                       | A43B 5/02                            |
| (11) EP3351607                             | (32) 15.07.2010                      | A43B 13/14                           |
| (21) EP18150217.0                          | 18.02.2011                           | (11) EP3651599                       |
| (47) 14.07.2021                            | (33) United States of America        | (21) EP18755309.4                    |
| (22) 03.01.2018                            | United States of America             | (47) 14.07.2021                      |
| (54) HOT-TRANSFER ADHESIVE                 | (51) A42B 3/06                       | (87) IB2018055207                    |
| ELEMENTS APPLIED BY THERMAL                | A42B 3/22                            | 17.01.2019                           |
| TRANSFER PROCESS FOR                       | A42B 3/28                            | (22) 13.07.2018                      |
| GLUING AND SEALING OF TEXTILE              | (11) EP3446585                       | (54) SPORT FOOTWEAR WITH IMPROVED    |
| MATERIALS                                  | (21) EP18190100.0                    | STRUCTURE                            |
| (73) Heliotextil-Etiquetas E Passamanarias | (47) 07.07.2021                      | (73) Veracini, Marco                 |
| S.A.                                       | (22) 21.08.2018                      | (72) Veracini, Marco                 |
| (72) BULHOSA DE AGUIAR PACHECO,            | (54) CLIP-FREE HELMET VISORS         | (31) 201700079230                    |
| JOSÉ MIGUEL                                | (73) Bell Sports, Inc.               | (32) 13.07.2017                      |
| (31) 109869                                | (72) McDAVITT, Joel W.               | (33) Italy                           |
| (32) 20.01.2017                            | (31) 201762550539 P                  | (51) A43B 3/00                       |
| (33) Portugal                              | 201816041739                         | A43B 13/14                           |
| (51) A41D 27/24                            | (32) 25.08.2017                      | (11) EP3294085                       |
| A62D 5/00                                  | 21.07.2018                           | (21) EP16723458.2                    |
| B32B 5/02                                  | (33) United States of America        | (47) 14.07.2021                      |
| B32B 7/12                                  | United States of America             | (87) GB2016051342                    |
| B32B 25/08                                 | (51) A43B 1/00                       | 17.11.2016                           |
| B32B 25/10                                 | A43B 1/04                            | (22) 11.05.2016                      |
| B32B 25/16                                 | A43B 3/00                            | (54) ROTATABLE SOLE ASSEMBLY         |
| B32B 25/20                                 | A43B 5/02                            | (73) Satra Technology Centre Limited |
| B32B 27/08                                 | A43B 23/02                           | (72) SMITH, David Roger              |

|                                         |                                    |                                    |
|-----------------------------------------|------------------------------------|------------------------------------|
| BAYES, Thomas John William              | A43B 7/30                          | (73) Reebok International Ltd.     |
| MUIRHEAD, Philip David                  | A43B 13/40                         | (72) Callahan, Erica               |
| (31) 201508120                          | A43B 23/22                         | Montross, Matthew                  |
| (32) 13.05.2015                         | (11) EP3471570                     | Hardigan, Henry                    |
| (33) United Kingdom                     | (21) EP16906483.9                  | Vestuti, Ricardo                   |
| (51) A43B 3/00                          | (47) 07.07.2021                    | Boudreau, Matthew                  |
| A43C 7/08                               | (87) US2016053335                  | Hobson, Daniel                     |
| A43C 11/00                              | 28.12.2017                         | Scott, Daley                       |
| A43C 11/14                              | (22) 23.09.2016                    | Bischoff, Bob                      |
| A43C 11/16                              | (54) HIGH HEEL SHOE                | (31) 506957                        |
| (11) EP3429396                          | (73) YZ Studio, Inc.               | 748246                             |
| (21) EP17767169.0                       | (72) ZAKE, Yamuna                  | 832464                             |
| (47) 14.07.2021                         | (31) 201615188276                  | (32) 21.07.2009                    |
| (87) US2017021210                       | (32) 21.06.2016                    | 26.03.2010                         |
| 21.09.2017                              | (33) United States of America      | 08.07.2010                         |
| (22) 07.03.2017                         | (51) A43B 13/00                    | (33) United States of America      |
| (54) TENSIONING SYSTEM AND REEL         | A43B 13/12                         | United States of America           |
| MEMBER FOR FOOTWEAR                     | A43B 13/14                         | United States of America           |
| (73) NIKE Innovate C.V.                 | A43B 13/18                         | (51) A43B 13/12                    |
| (72) BEERS, Tiffany A.                  | A43B 17/00                         | A43B 17/00                         |
| OWINGS, Andrew A.                       | (11) EP3419467                     | D06M 11/74                         |
| (31) 201615070158                       | (21) EP17757349.0                  | D06N 3/00                          |
| (32) 15.03.2016                         | (47) 14.07.2021                    | D06N 3/14                          |
| (33) United States of America           | (87) US2017019450                  | (11) EP3577270                     |
| (51) A43B 5/00                          | 31.08.2017                         | (21) EP18707420.8                  |
| (11) EP2949232                          | (22) 24.02.2017                    | (47) 07.07.2021                    |
| (21) EP15169989.9                       | (54) INSOLE WITH SUSPENDED MESH    | (87) IB2018050663                  |
| (47) 14.07.2021                         | SURFACE                            | 09.08.2018                         |
| (22) 29.05.2015                         | (73) FINIKS, INC DBA PLAE          | (22) 02.02.2018                    |
| (54) CLIMBING SHOE                      | (72) RINGHOLZ, Ryan                | (54) MANUFACTURED ARTICLE IN SHEET |
| (73) Calzaturificio S.C.A.R.P.A. S.p.A. | LIN, Hung-Chia                     | FORM, PARTICULARLY INTENDED        |
| (72) Mariacher, Heinz                   | (31) 201662299587 P                | FOR USE IN THE MANUFACTURE OF      |
| (31) TV20140075                         | (32) 25.02.2016                    | FOOTWEAR, CLOTHING ITEMS AND       |
| (32) 29.05.2014                         | (33) United States of America      | ACCESSORIES AND UPHOLSTERY,        |
| (33) Italy                              | (51) A43B 13/04                    | AND RELATED REALIZATION            |
| (51) A43B 5/18                          | A43B 13/18                         | PROCEDURE                          |
| A43B 7/14                               | A43B 17/14                         | (73) Fadel S.r.l.                  |
| A43B 13/14                              | C08F 2/44                          | (72) DELLA MAGGIORA, Andrea        |
| A63B 21/00                              | C08F 2/56                          | GIUNTOLI, Michele                  |
| A63B 22/00                              | C08F 220/06                        | (31) 201700012184                  |
| A63B 22/02                              | C08J 9/08                          | (32) 03.02.2017                    |
| A63B 22/06                              | C08J 9/12                          | (33) Italy                         |
| A63B 22/14                              | C08J 9/20                          | (51) A43B 17/00                    |
| A63B 22/16                              | C08J 9/228                         | A43B 17/14                         |
| A63B 22/18                              | (11) EP3620075                     | A43D 1/02                          |
| A63B 22/20                              | (21) EP18195355.5                  | B29D 35/12                         |
| A63B 23/04                              | (47) 07.07.2021                    | (11) EP3190915                     |
| A63B 23/08                              | (22) 19.09.2018                    | (21) EP15763171.4                  |
| A63B 26/00                              | (54) ABSORBENT POLYMERIC FOAM FOR  | (47) 07.07.2021                    |
| A63B 69/06                              | SHOE INSOLES                       | (87) US2015047981                  |
| A63B 69/16                              | (73) Evonik Operations GmbH        | 17.03.2016                         |
| A63B 71/00                              | (72) Fischer, Steffen              | (22) 01.09.2015                    |
| (11) EP2949234                          | Schmidt, Diedrich                  | (54) APPARATUS FOR MAKING CUSTOM   |
| (21) EP15166989.2                       | Smith, Scott                       | ORTHOTICS, INSOLES AND OTHER       |
| (47) 07.07.2021                         | Yang, Xinyuan                      | FOOTWEAR INSERTS                   |
| (22) 08.05.2015                         | (31) 201715727245                  | (73) Superfeet Worldwide, Inc.     |
| (54) PROPRIOCEPTIVE/KINESTHETIC         | (32) 06.10.2017                    | (72) GOOCH, Matthew Warren         |
| APPARATUS AND METHOD                    | (33) United States of America      | MCCOY, Brent                       |
| (73) APOS Medical Assets Ltd.           | (51) A43B 13/12                    | WAKELAND, Dan                      |
| (72) Elbaz, Avi                         | A43B 13/14                         | (31) 201414485552                  |
| Mor, Amit                               | A43B 13/18                         | (32) 12.09.2014                    |
| (31) 201414283400                       | A43B 13/22                         | (33) United States of America      |
| (32) 21.05.2014                         | (11) EP3603437                     | (51) A43B 23/02                    |
| (33) United States of America           | (21) EP19196198.6                  | A43C 11/00                         |
| (51) A43B 7/00                          | (47) 14.07.2021                    | A43D 3/02                          |
| A43B 7/14                               | (22) 21.07.2010                    | B29C 51/10                         |
| A43B 7/16                               | (54) ARTICLE OF FOOTWEAR HAVING AN | B29C 51/14                         |
| A43B 7/22                               | UNDULATING SOLE                    | B29C 51/16                         |

|                                                                               |                                                                                                       |                                                                              |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
| B29D 35/00                                                                    | LEE, Sang Woo                                                                                         | (31) 2016006598                                                              |
| B29D 35/14                                                                    | KIM, Seong Hun                                                                                        | (32) 15.01.2016                                                              |
| (11) EP3153052                                                                | JANG, Byoung Joon                                                                                     | (33) Japan                                                                   |
| (21) EP16192792.6                                                             | (31) 20180024310                                                                                      | (51) A44B 19/42                                                              |
| (47) 14.07.2021                                                               | (32) 28.02.2018                                                                                       | C25D 7/02                                                                    |
| (22) 07.10.2016                                                               | (33) Korea (Republic)                                                                                 | C25D 17/00                                                                   |
| (54) MANUFACTURING METHOD FOR COATING A FABRIC WITH A THREE-DIMENSIONAL SHAPE | (51) A44B 18/00                                                                                       | C25D 17/12                                                                   |
| (73) adidas AG                                                                | A45C 13/30                                                                                            | C25D 17/16                                                                   |
| (72) LEE, Renold                                                              | A45F 3/00                                                                                             | (11) EP3556908                                                               |
| CHEN, Lulu                                                                    | A45F 3/14                                                                                             | (21) EP17880956.2                                                            |
| FORESTER, Sam                                                                 | A45F 5/02                                                                                             | (47) 07.07.2021                                                              |
| (31) 102015219636                                                             | F41H 1/02                                                                                             | (87) JP2017030196                                                            |
| (32) 09.10.2015                                                               | F42B 39/02                                                                                            | 21.06.2018                                                                   |
| (33) Germany                                                                  | (11) EP3391775                                                                                        | (22) 23.08.2017                                                              |
| (51) A43C 15/06                                                               | (21) EP18177145.2                                                                                     | (54) METHOD AND DEVICE FOR ELECTROPLATING FASTENER CHAIN                     |
| (11) EP3415029                                                                | (47) 07.07.2021                                                                                       | (73) YKK Corporation                                                         |
| (21) EP17175860.0                                                             | (22) 08.08.2012                                                                                       | (72) KIKUKAWA, Norio                                                         |
| (47) 07.07.2021                                                               | (54) LIGHT WEIGHT MODULAR POUCH ATTACHMENT SYSTEM                                                     | HASHIBA, Koji                                                                |
| (22) 13.06.2017                                                               | (73) FirstSpear, LLC                                                                                  | (31) PCT/JP2016/087127                                                       |
| (54) CRAMPON WITH FASTENING SYSTEM                                            | (72) COLE, Michael E.                                                                                 | (32) 13.12.2016                                                              |
| (73) Oberalp Spa                                                              | CARVER, Scott J.                                                                                      | (33) World Intellectual Property Office (WIPO)                               |
| (72) Righele, Matteo                                                          | (31) 201161521309 P                                                                                   | (51) A44C 17/02                                                              |
| (51) A44B 11/24                                                               | (32) 08.08.2011                                                                                       | A44C 17/04                                                                   |
| A44C 5/20                                                                     | (33) United States of America                                                                         | G04B 47/04                                                                   |
| (11) EP3709834                                                                | (51) A44B 18/00                                                                                       | (11) EP3125718                                                               |
| (21) EP18800180.4                                                             | A61F 13/62                                                                                            | (21) EP15726508.3                                                            |
| (47) 07.07.2021                                                               | B32B 5/02                                                                                             | (47) 14.07.2021                                                              |
| (87) EP2018081057                                                             | B32B 5/12                                                                                             | (87) DE2015000165                                                            |
| 23.05.2019                                                                    | B32B 5/14                                                                                             | 08.10.2015                                                                   |
| (22) 13.11.2018                                                               | B32B 5/26                                                                                             | (22) 01.04.2015                                                              |
| (54) CLAMP FOR A WRIST STRAP                                                  | B32B 27/12                                                                                            | (54) OBJECT HAVING A MOVABLE JEWELRY ELEMENT                                 |
| (73) Televic Healthcare NV                                                    | D04H 11/00                                                                                            | (73) Gebrüder Schaffrath GmbH                                                |
| (72) VERGAUWE, Karen                                                          | D04H 1/08                                                                                             | (72) LEUZ, Alexander                                                         |
| (31) 201705834                                                                | D04H 3/14                                                                                             | (31) 102014005176                                                            |
| 201805111                                                                     | B32B 7/04                                                                                             | 102014010435                                                                 |
| (32) 15.11.2017                                                               | (11) EP3128984                                                                                        | (32) 01.04.2014                                                              |
| 22.02.2018                                                                    | (21) EP15714221.7                                                                                     | 16.07.2014                                                                   |
| (33) Belgium                                                                  | (47) 14.07.2021                                                                                       | (33) Germany                                                                 |
| Belgium                                                                       | (87) EP2015057440                                                                                     | Germany                                                                      |
| (51) A44B 11/25                                                               | 15.10.2015                                                                                            | (51) A44C 27/00                                                              |
| A45F 3/04                                                                     | (22) 07.04.2015                                                                                       | C22C 5/02                                                                    |
| A45F 3/06                                                                     | (54) LOOPED LAYER OR STRIP INCLUDING DIFFERENTIAL ATTACHMENT AREAS AND NAPPY COMPRISING SUCH A LAYER  | C22F 1/14                                                                    |
| (11) EP3490399                                                                | (73) Aplix                                                                                            | (11) EP3553192                                                               |
| (21) EP17833704.4                                                             | (72) MAHE, Anthony Bertrand                                                                           | (21) EP19169009.8                                                            |
| (47) 07.07.2021                                                               | (31) 1400850                                                                                          | (47) 14.07.2021                                                              |
| (87) IL2017050841                                                             | (32) 08.04.2014                                                                                       | (22) 12.04.2019                                                              |
| 01.02.2018                                                                    | (33) France                                                                                           | (54) TARNISHING RESISTANT GOLD ALLOY AT 14K AND METHOD OF PRODUCTION THEREOF |
| (22) 28.07.2017                                                               | (51) A44B 19/02                                                                                       | (73) Argor-Heraeus S.A.                                                      |
| (54) CONNECTOR                                                                | A44B 19/06                                                                                            | (72) Arnaboldi, Sergio                                                       |
| (73) Marom Dolphin Ltd.                                                       | A44B 19/42                                                                                            | Rossini, Marta                                                               |
| (72) SHTRIKER, Yehonatan                                                      | A44B 19/44                                                                                            | Nauer, Marco                                                                 |
| (31) 24701216                                                                 | (11) EP3403520                                                                                        | (31) 4652018                                                                 |
| (32) 28.07.2016                                                               | (21) EP17738499.7                                                                                     | (32) 12.04.2018                                                              |
| (33) Israel                                                                   | (47) 07.07.2021                                                                                       | (33) Switzerland                                                             |
| (51) A44B 13/00                                                               | (87) JP2017000881                                                                                     | (51) A45B 1/04                                                               |
| B23K 9/133                                                                    | 20.07.2017                                                                                            | A61H 3/02                                                                    |
| B65D 5/46                                                                     | (22) 12.01.2017                                                                                       | (11) EP3720311                                                               |
| B65H 49/08                                                                    | (54) CERAMIC COMPONENT, FASTENER STRINGER CONTAINING SAME, AND METHOD FOR PRODUCING FASTENER STRINGER | (21) EP18833270.4                                                            |
| (11) EP3533552                                                                | (73) YKK Corporation                                                                                  | (47) 07.07.2021                                                              |
| (21) EP19159278.1                                                             | (72) KATO, Hisanori                                                                                   | (87) FR2018053148                                                            |
| (47) 14.07.2021                                                               | TAGUCHI, Tomoko                                                                                       | 13.06.2019                                                                   |
| (22) 26.02.2019                                                               |                                                                                                       | (22) 07.12.2018                                                              |
| (54) PAIL PACK INCLUDING A STRAP GUIDE                                        |                                                                                                       |                                                                              |
| (73) Kiswel Ltd.                                                              |                                                                                                       |                                                                              |
| (72) SONG, Chang Uk                                                           |                                                                                                       |                                                                              |

|                                                                                                    |                                                             |                                                                                                                |
|----------------------------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| (54) DEVICE FOR MAINTAINING AT LEAST ONE CANE IN A WAITING POSITION NOT HELD BY A USER             | 09.07.2020                                                  | (11) EP3584684                                                                                                 |
| (73) Noel, Marc                                                                                    | (22) 04.01.2019                                             | (21) EP19169018.9                                                                                              |
| (72) Noel, Marc                                                                                    | (54) SMART LUGGAGE SYSTEM WITH CAMERA INSTALLED IN PULL ROD | (47) 07.07.2021                                                                                                |
| (31) 1761854                                                                                       | (73) Lingdong Technology (Beijing) Co. Ltd                  | (22) 12.04.2019                                                                                                |
| (32) 08.12.2017                                                                                    | (72) Qi, Ou                                                 | (54) STYLUS PEN HOLDER                                                                                         |
| (33) France                                                                                        | GUO, Xudong                                                 | (73) Kum Oh Electronics CO., LTD.                                                                              |
| (51) A45B 25/14                                                                                    | (51) A45C 5/06                                              | (72) KIM, Ki Sang                                                                                              |
| B60R 5/04                                                                                          | A45C 13/10                                                  | (31) 20180069979                                                                                               |
| B64C 39/02                                                                                         | (11) EP3668341                                              | (32) 19.06.2018                                                                                                |
| G05D 1/10                                                                                          | (21) EP18786039.0                                           | (33) Korea (Republic)                                                                                          |
| G08C 17/02                                                                                         | (47) 07.07.2021                                             | (51) A45D 1/04                                                                                                 |
| (11) EP3609743                                                                                     | (87) IB2018057363                                           | A45D 1/18                                                                                                      |
| (21) EP18816477.6                                                                                  | 28.03.2019                                                  | A45D 2/00                                                                                                      |
| (47) 07.07.2021                                                                                    | (22) 24.09.2018                                             | (11) EP3478116                                                                                                 |
| (87) CN2018091215                                                                                  | (54) CARRYING CASE HAVING MAGNETIC ACCESS PANEL             | (21) EP17745803.1                                                                                              |
| 20.12.2018                                                                                         | (73) Nexus Technologies, Inc.                               | (47) 07.07.2021                                                                                                |
| (22) 14.06.2018                                                                                    | (72) BOMER, Benjamin W.                                     | (87) FR2017051722                                                                                              |
| (54) UNMANNED AERIAL VEHICLE (UAV) AND METHOD AND SYSTEM FOR HOLDING UMBRELLA USING UAV            | (31) 201762562831 P                                         | 04.01.2018                                                                                                     |
| (73) Zhejiang Geely Holding Group Co., Ltd. Zhejiang Geely Automobile Research Institute Co., Ltd. | (32) 25.09.2017                                             | (22) 27.06.2017                                                                                                |
| (72) Li, Shufu                                                                                     | (33) United States of America                               | (54) HAIR-STRAIGHTENER WITH OPTIMISED BRUSH                                                                    |
| (31) 201710453692                                                                                  | (51) A45C 11/00                                             | (73) SEB S.A.                                                                                                  |
| (32) 15.06.2017                                                                                    | (11) EP3469945                                              | (72) BONNEMAIRE, Baptiste                                                                                      |
| (33) China                                                                                         | (21) EP17196469.5                                           | PONCET, Stéphane                                                                                               |
| (51) A45C 1/00                                                                                     | (47) 14.07.2021                                             | LAUCHET, Nicolas                                                                                               |
| A45C 1/06                                                                                          | (22) 13.10.2017                                             | (31) 1656085                                                                                                   |
| A45C 1/08                                                                                          | (54) PANEL FRAME STRUCTURE FOR A LUGGAGE ARTICLE            | (32) 29.06.2016                                                                                                |
| A45C 11/18                                                                                         | (73) Samsonite IP Holdings S.À.R.L.                         | (33) France                                                                                                    |
| (11) EP2501253                                                                                     | (72) MEERSSCHAERT, Reinhard                                 | (51) A45D 8/00                                                                                                 |
| (21) EP10832319.7                                                                                  | (51) A45C 11/00                                             | A45D 8/06                                                                                                      |
| (47) 07.07.2021                                                                                    | (11) EP3512183                                              | A45D 8/14                                                                                                      |
| (87) US2010057619                                                                                  | (21) EP17848898.7                                           | A45D 8/24                                                                                                      |
| 26.05.2011                                                                                         | (47) 14.07.2021                                             | A45D 8/28                                                                                                      |
| (22) 22.11.2010                                                                                    | (87) JP2017032618                                           | A45D 8/32                                                                                                      |
| (54) MULTI-PURPOSE AUXILIARY MEMBER FOR USE WITH PERSONAL CARDS                                    | 15.03.2018                                                  | (11) EP3701828                                                                                                 |
| (73) Cardware, LLC.                                                                                | (22) 11.09.2017                                             | (21) EP20159441.3                                                                                              |
| (72) MIADICH, John B.                                                                              | (54) PORTABLE TERMINAL COVER                                | (47) 14.07.2021                                                                                                |
| (31) 623415                                                                                        | (73) Takada, Ken                                            | (22) 26.02.2020                                                                                                |
| (32) 21.11.2009                                                                                    | (72) Takada, Ken                                            | (54) EFFECTIVE CLOTH HOLDER                                                                                    |
| (33) United States of America                                                                      | (31) 2016196025                                             | (73) Weist, Jennifer                                                                                           |
| (51) A45C 1/04                                                                                     | 2017047224                                                  | (72) Weist, Jennifer                                                                                           |
| A45C 3/00                                                                                          | (32) 12.09.2016                                             | (31) 102019105046                                                                                              |
| A45C 13/26                                                                                         | 13.03.2017                                                  | (32) 27.02.2019                                                                                                |
| A45F 3/04                                                                                          | (33) Japan                                                  | (33) Germany                                                                                                   |
| A45F 3/14                                                                                          | Japan                                                       | (51) A45D 20/38                                                                                                |
| (11) EP3616556                                                                                     | (51) A45C 13/00                                             | H05B 3/16                                                                                                      |
| (21) EP18191487.0                                                                                  | H04M 1/02                                                   | (11) EP3682711                                                                                                 |
| (47) 14.07.2021                                                                                    | H04M 1/18                                                   | (21) EP19756250.7                                                                                              |
| (22) 29.08.2018                                                                                    | H04B 1/3888                                                 | (47) 07.07.2021                                                                                                |
| (54) CARRIER BAG                                                                                   | (11) EP3346678                                              | (87) IB2019055780                                                                                              |
| (73) Schudel, Anton J.                                                                             | (21) EP18150484.6                                           | 23.01.2020                                                                                                     |
| (72) Schudel, Anton J.                                                                             | (47) 14.07.2021                                             | (22) 08.07.2019                                                                                                |
| (51) A45C 5/04                                                                                     | (22) 05.01.2018                                             | (54) AIR HEATING DEVICE FOR A HAIRDRYER, BLOWING DEVICE FOR A HAIRDRYER, AND HAIRDRYER COMPRISING SAID DEVICES |
| A45C 5/14                                                                                          | (54) COVER AND ELECTRONIC DEVICE INCLUDING THE SAME         | (73) Gamma S.P.A.                                                                                              |
| A45C 13/22                                                                                         | (73) Samsung Electronics Co., Ltd.                          | (72) LABIRIO, Marco                                                                                            |
| A45C 13/28                                                                                         | (72) Kim, Ik Sang                                           | LAVENI, Pierpaolo                                                                                              |
| A45C 15/00                                                                                         | Park, Hyoung Shin                                           | RE, Renzo                                                                                                      |
| G06K 9/00                                                                                          | (31) 20170001725                                            | FERRI, Daniele                                                                                                 |
| (11) EP3697252                                                                                     | (32) 05.01.2017                                             | (31) 201800007305                                                                                              |
| (21) EP19779349.0                                                                                  | (33) Korea (Republic)                                       | (32) 18.07.2018                                                                                                |
| (47) 07.07.2021                                                                                    | (51) A45C 13/02                                             | (33) Italy                                                                                                     |
| (87) CN2019070389                                                                                  | B43K 23/04                                                  | (51) A45D 27/22                                                                                                |
|                                                                                                    | B43M 99/00                                                  | B26B 19/38                                                                                                     |
|                                                                                                    | G06F 3/0354                                                 | B26B 21/24                                                                                                     |
|                                                                                                    |                                                             | B26B 21/40                                                                                                     |

|                                             |                                          |                                  |
|---------------------------------------------|------------------------------------------|----------------------------------|
| B65D 6/06                                   | Winkler, Jan                             | BORISENKO, Yekaterina            |
| (11) EP3338971                              | Zimmermann, Michael                      | JEANNE, Vincent                  |
| (21) EP17205015.5                           | Legner, Andreas                          | DE JAGER, Marinus Karel Johannes |
| (47) 14.07.2021                             |                                          | GRABULOV, Aleksandro             |
| (22) 11.11.2014                             | (51) A46B 5/00                           | (31) 201662419554 P              |
| (54) SHAVING ASSEMBLY DISPENSER             | A46B 9/02                                | (32) 09.11.2016                  |
| (73) Shavelogic, Inc.                       | (11) EP3119239                           | (33) United States of America    |
| (72) Griffin, John W.                       | (21) EP15711706.0                        |                                  |
| Tucker, William E.                          | (47) 14.07.2021                          | (51) A47B 77/08                  |
| Provost, Craig A.                           | (87) EP2015055475                        | A47B 96/20                       |
| (31) 201314101163                           | 24.09.2015                               | E05D 5/02                        |
| (32) 09.12.2013                             | (22) 16.03.2015                          | E05D 7/04                        |
| (33) United States of America               | (54) APPLICATOR FOR COSMETIC             | (11) EP3563722                   |
| (51) A45D 27/29                             | PRODUCT AND ASSOCIATED                   | (21) EP18215566.3                |
| B26B 19/38                                  | APPLICATOR ASSEMBLY                      | (47) 14.07.2021                  |
| H02J 7/00                                   | (73) Albéa Services                      | (22) 21.12.2018                  |
| (11) EP3661003                              | (72) MANICI, Davide                      | (54) CABINET DOOR ASSEMBLY AND   |
| (21) EP19205654.7                           | (31) 1452168                             | HOUSEHOLD APPLIANCE              |
| (47) 07.07.2021                             | (32) 17.03.2014                          | (73) Whirlpool Corporation       |
| (22) 28.10.2019                             | (33) France                              | (72) Ridilla, Jaroslav           |
| (54) CHARGING STAND WITH SWIVEL             | (51) A46B 7/04                           | (31) 201815968088                |
| JACK                                        | A47L 25/08                               | (32) 01.05.2018                  |
| (73) Wahl Clipper Corporation               | (11) EP2482706                           | (33) United States of America    |
| (72) VOCK, Tracy                            | (21) EP10819776.5                        | (51) A47B 91/16                  |
| FREAS, Jon                                  | (47) 07.07.2021                          | (11) EP3536191                   |
| (31) 201816201820                           | (87) CA2010001545                        | (21) EP19161212.6                |
| (32) 27.11.2018                             | 07.04.2011                               | (47) 14.07.2021                  |
| (33) United States of America               | (22) 28.09.2010                          | (22) 07.03.2019                  |
| (51) A45D 29/02                             | (54) FABRIC CARE DEVICE                  | (54) ADJUSTABLE TABLE            |
| A45D 29/05                                  | (73) GLEENER INC.                        | (73) Benkert, Tobias             |
| A45D 29/14                                  | (72) COLE, Kim                           | (72) Benkert, Tobias             |
| (11) EP3653081                              | (31) 247194 P                            | (31) 102018203414                |
| (21) EP18206670.4                           | (32) 30.09.2009                          | (32) 07.03.2018                  |
| (47) 07.07.2021                             | (33) United States of America            | (33) Germany                     |
| (22) 16.11.2018                             | (51) A46B 13/02                          | (51) A47B 96/02                  |
| (54) REPLACEABLE ABRASIVE BODY              | A46B 15/00                               | A47F 5/00                        |
| (73) Procon Professional Contributions GmbH | A61C 1/18                                | A47F 10/02                       |
| (72) HEIMERL, Albert                        | A61C 17/26                               | G06Q 10/08                       |
| (51) A45D 34/00                             | F16H 35/10                               | (11) EP3657993                   |
| A45D 40/00                                  | F16H 55/10                               | (21) EP18749749.0                |
| B65D 43/02                                  | (11) EP3570774                           | (47) 07.07.2021                  |
| B65D 51/18                                  | (21) EP18702137.3                        | (87) EP2018070281                |
| B65D 51/32                                  | (47) 07.07.2021                          | 31.01.2019                       |
| (11) EP3383757                              | (87) EP2018051068                        | (22) 26.07.2018                  |
| (21) EP16849316.1                           | 26.07.2018                               | (54) STORAGE SHELF FOR STORAGE   |
| (47) 07.07.2021                             | (22) 17.01.2018                          | DEVICE WITH A SENSOR STRIP THAT  |
| (87) US2016049186                           | (54) ELECTRIC TOOTHBRUSH DRIVE           | CAN BE APPLIED TO THE LOWER      |
| 30.03.2017                                  | SYSTEM                                   | SIDE FOR OPTICALLY DETECTING     |
| (22) 29.08.2016                             | (73) GlaxoSmithKline Consumer Healthcare | STOCK THAT CAN BE STORED ON      |
| (54) SCREW-TYPE CLOSURE SYSTEMS             | (UK) IP Limited                          | THE UPPER SIDE                   |
| WITH MAGNETIC FEATURE                       | (72) DIAMOND, David                      | (73) Würth International AG      |
| (73) ELC Management LLC                     | DIAMOND, Jean                            | (72) HOHL, Wolfgang              |
| (72) JACOB, Christophe                      | (31) S20170021                           | STARKE, Johannes                 |
| BOUIX, Herve                                | (32) 19.01.2017                          | KOCH, Simon                      |
| (31) 201514865040                           | (33) Ireland                             | (31) 102017117177                |
| (32) 25.09.2015                             | (51) A46B 15/00                          | (32) 28.07.2017                  |
| (33) United States of America               | A61C 17/22                               | (33) Germany                     |
| (51) A46B 3/14                              | (11) EP3538019                           | (51) A47B 97/00                  |
| A46B 7/04                                   | (21) EP17800740.7                        | A47G 3/00                        |
| A46B 7/08                                   | (47) 07.07.2021                          | F16B 12/20                       |
| (11) EP3210494                              | (87) EP2017078112                        | F16B 37/14                       |
| (21) EP16157215.1                           | 17.05.2018                               | (11) EP3622859                   |
| (47) 07.07.2021                             | (22) 03.11.2017                          | (21) EP19196475.8                |
| (22) 24.02.2016                             | (54) NETWORK FOR COLLABORATING           | (47) 07.07.2021                  |
| (54) FASTENING SYSTEM FOR BRUSH             | PERSONAL CARE DEVICES                    | (22) 10.09.2019                  |
| ELEMENTS                                    | (73) Koninklijke Philips N.V.            | (54) BUSH FOR THE ASSEMBLY OF    |
| (73) Weber Bürstensysteme GmbH              | (72) DEANE, Steven Charles               | PANELS OR FURNITURE PIECES AND   |
| (72) Menken, Ulrich                         | HELAOUI, Rim                             | METHOD FOR THE ASSEMBLY OF       |
|                                             | RMAILE, Amir Hussein                     | SAID BUSH                        |

|                                        |                                         |                                   |
|----------------------------------------|-----------------------------------------|-----------------------------------|
| (73) ITALFELTRI S.r.l.                 | (11) EP3629837                          | (54) TIERED VOID CELLS            |
| (72) BORSATO, Henry                    | (21) EP18724565.9                       | (73) Skydex Technologies, Inc.    |
| (31) 201800008526                      | (47) 14.07.2021                         | (72) DAHL, Jerod                  |
| (32) 12.09.2018                        | (87) EP2018063053                       | FOLEY, Peter F.                   |
| (33) Italy                             | 29.11.2018                              | (31) 201662404969 P               |
| (51) A47C 1/02                         | (22) 18.05.2018                         | (32) 06.10.2016                   |
| A47C 31/12                             | (54) ADJUSTMENT DEVICE FOR A CHAIR      | (33) United States of America     |
| A61B 5/00                              | WITH ROCKING MECHANISM                  | (51) A47D 13/02                   |
| A61B 5/11                              | (73) Brado S.p.A.                       | (11) EP3457893                    |
| H04L 29/08                             | (72) SERENA, Stefano                    | (21) EP17799756.6                 |
| (11) EP3240459                         | (31) 201700057341                       | (47) 07.07.2021                   |
| (21) EP15876167.6                      | (32) 26.05.2017                         | (87) SE2017050057                 |
| (47) 14.07.2021                        | (33) Italy                              | 23.11.2017                        |
| (87) US2015067861                      | (51) A47C 7/36                          | (22) 20.01.2017                   |
| 07.07.2016                             | B60N 2/56                               | (54) BABY SEAT CARRIER            |
| (22) 29.12.2015                        | B60N 2/68                               | (73) Najell AB                    |
| (54) SYSTEM ARCHITECTURE FOR           | B33Y 80/00                              | (72) NAJAFI KRISTENSEN, Niklas    |
| OFFICE PRODUCTIVITY STRUCTURE          | (11) EP3139794                          | NAJAFI KRISTENSEN, Freja          |
| COMMUNICATIONS                         | (21) EP15789164.9                       | (31) 1650694                      |
| (73) Herman Miller, Inc.               | (47) 07.07.2021                         | (32) 20.05.2016                   |
| (72) HOYT, Christopher                 | (87) US2015029621                       | (33) Sweden                       |
| RUCKER, Daniel                         | 12.11.2015                              | (51) A47F 1/08                    |
| DORAN, Joseph                          | (22) 07.05.2015                         | A47F 1/10                         |
| ALEXANDER, Brian                       | (54) SEAT FRAME AS FORMED BY            | A47F 10/06                        |
| DALEY-FELL, Adam                       | ADDITIVE MANUFACTURING                  | A47G 21/00                        |
| (31) 201462097439 P                    | (73) Adient Luxembourg Holding S.à r.l. | (11) EP3445210                    |
| 201562174333 P                         | (72) WHITE, Brennon                     | (21) EP18785243.9                 |
| (32) 29.12.2014                        | HARRIS, Mark                            | (47) 07.07.2021                   |
| 11.06.2015                             | SAKKINEN, Dan                           | (87) US2018033485                 |
| (33) United States of America          | MICHALAK, Eric                          | 29.11.2018                        |
| United States of America               | LAHO, Jeff                              | (22) 18.05.2018                   |
| (51) A47C 1/023                        | (31) 201461990924 P                     | (54) UTENSIL DISPENSER SYSTEM     |
| A47C 1/12                              | (32) 09.05.2014                         | (73) Hubbard, Robert F.           |
| A47C 3/18                              | (33) United States of America           | (72) Hubbard, Robert F.           |
| (11) EP3510893                         | (51) A47C 19/02                         | (31) 201762509388 P               |
| (21) EP19151467.8                      | A47C 23/00                              | 201762581130 P                    |
| (47) 07.07.2021                        | A47C 23/06                              | (32) 22.05.2017                   |
| (22) 11.01.2019                        | (11) EP3659469                          | 03.11.2017                        |
| (54) MECHANISM FOR A SEAT AND/OR       | (21) EP19211444.5                       | (33) United States of America     |
| LOUNGER AND A SEAT AND/OR              | (47) 07.07.2021                         | United States of America          |
| LOUNGER WITH THE MECHANISM             | (22) 26.11.2019                         | (51) A47F 3/04                    |
| AND USE OF SAME                        | (54) BOX SPRING BED                     | B65D 81/38                        |
| (73) Koinor Polstermöbel GmbH & Co. KG | (73) Schwarz, Dieter                    | F25D 23/06                        |
| (72) Sachon, Frank                     | (72) Schwarz, Dieter                    | (11) EP3620084                    |
| (31) 102018100653                      | (31) 102018130108                       | (21) EP19191706.1                 |
| 18167389                               | (32) 28.11.2018                         | (47) 07.07.2021                   |
| (32) 12.01.2018                        | (33) Germany                            | (22) 14.08.2019                   |
| 13.04.2018                             | (51) A47C 19/12                         | (54) REFRIGERATED DISPLAY COUNTER |
| (33) Germany                           | A47C 23/00                              | WITH IMPROVED INSULATION          |
| European Patent Office (EPO)           | A47C 23/06                              | SYSTEM                            |
| (51) A47C 1/032                        | (11) EP3659470                          | (73) CLABO SOCIETA' PER AZIONI    |
| A47C 1/035                             | (21) EP19211447.8                       | (72) ABBONANTE, Marco             |
| A61G 5/10                              | (47) 07.07.2021                         | BOSSI, Luca                       |
| A47C 1/0355                            | (22) 26.11.2019                         | (31) 201800008429                 |
| (11) EP3634177                         | (54) BOX SPRING                         | (32) 07.09.2018                   |
| (21) EP18730029.8                      | (73) Schwarz, Dieter                    | (33) Italy                        |
| (47) 07.07.2021                        | (72) Schwarz, Dieter                    | (51) A47F 3/04                    |
| (87) FR2018051251                      | (31) 102018130110                       | F25D 17/06                        |
| 13.12.2018                             | (32) 28.11.2018                         | (11) EP3412996                    |
| (22) 31.05.2018                        | (33) Germany                            | (21) EP18175915.0                 |
| (54) ARTICULATED SEAT DEVICE           | (51) A47C 23/00                         | (47) 14.07.2021                   |
| (73) Etablissements Lebrun             | A47C 27/06                              | (22) 05.06.2018                   |
| (72) DEGOTTEX, Jean-Marc               | (11) EP3506803                          | (54) REFRIGERATED DISPLAY UNIT    |
| (31) 1754962                           | (21) EP17859209.3                       | AND REFRIGERATED AIR FLOW         |
| (32) 05.06.2017                        | (47) 14.07.2021                         | DISTRIBUTION SYSTEM               |
| (33) France                            | (87) US2017055407                       | (73) Arneg S.p.A.                 |
| (51) A47C 3/026                        | 12.04.2018                              | (72) LAURI, Igor                  |
| A47C 3/03                              | (22) 05.10.2017                         | (31) 201700063123                 |

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| (32) 08.06.2017                   | (54) MODULAR STEAMER ACCESSORY        | Quick Mill S.r.l.                     |
| (33) Italy                        | FOR STEAM-HEATING AND/OR -            | (72) SCHULTHES, Thomas                |
| (51) A47F 5/08                    | COOKING FOOD CONTAINED IN A           | MACCARONE, Angelo                     |
| A47F 7/28                         | CONTAINER                             | (31) 201700056947                     |
| (11) EP3113654                    | (73) SEB S.A.                         | (32) 25.05.2017                       |
| (21) EP15758992.0                 | (72) GUEGAN, Laurent                  | (33) Italy                            |
| (47) 07.07.2021                   | DELRUE, Olivier                       | (51) A47J 31/44                       |
| (87) US2015017018                 | BLOND, Laurent                        | B23P 17/00                            |
| 11.09.2015                        | (31) 1662879                          | B67D 1/00                             |
| (22) 23.02.2015                   | (32) 20.12.2016                       | B67D 1/12                             |
| (54) SYSTEMS FOR SECURING AND     | (33) France                           | B67D 7/06                             |
| DISPLAYING PRODUCTS               | (51) A47J 31/06                       | (11) EP2731906                        |
| (73) ISEE STORE INNOVATIONS, LLC  | (11) EP3592184                        | (21) EP12828664.8                     |
| (72) SCHAEFER, Mark               | (21) EP18710465.8                     | (47) 07.07.2021                       |
| BRENNER, Steven Allen             | (47) 14.07.2021                       | (87) US2012052697                     |
| VONDER HAAR, Joseph               | (87) EP2018056069                     | 07.03.2013                            |
| AYAD, Emad                        | 13.09.2018                            | (22) 28.08.2012                       |
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| 201462060223 P                    | (54) SET FOR USE IN THE PREPARATION   | DISPENSER                             |
| 201514623679                      | OF A BEVERAGE BY MEANS OF A           | (73) Automatic Bar Controls, Inc.     |
| (32) 07.03.2014                   | BEVERAGE PREPARATION DEVICE           | (72) HECHT, Thomas, R.                |
| 06.10.2014                        | (73) Delica AG                        | (31) 201113220546                     |
| 17.02.2015                        | (72) AFFOLTER, Roland                 | (32) 29.08.2011                       |
| (33) United States of America     | THILLA, Tim                           | (33) United States of America         |
| United States of America          | BRÖNNIMANN, Markus                    | (51) A47J 31/44                       |
| United States of America          | (31) 17160245                         | B65D 85/816                           |
| (51) A47G 21/18                   | 17160248                              | G06K 9/00                             |
| (11) EP3589172                    | (32) 10.03.2017                       | G06K 19/06                            |
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| (47) 14.07.2021                   | (33) European Patent Office (EPO)     | (21) EP17705923.5                     |
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| 07.09.2018                        | (51) A47J 31/36                       | (87) EP2017054152                     |
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| (54) DRINKING GLASS FOR DISTILLED | (21) EP14708072.5                     | (22) 23.02.2017                       |
| ALCOHOLIC BEVERAGE                | (47) 14.07.2021                       | (54) RECIPE CODE AND CONTAINER        |
| (73) Noble Glass Oy               | (87) EP2014054444                     | OF SYSTEM FOR PREPARING A             |
| (72) TUOMINEN, Jari               | 12.09.2014                            | BEVERAGE OR FOODSTUFF                 |
| (51) A47G 27/02                   | (22) 07.03.2014                       | (73) Société des Produits Nestlé S.A. |
| B32B 7/12                         | (54) DISPENSING DEVICE WITH BARRIER   | (72) NOTH, André                      |
| B32B 27/08                        | PROPERTIES                            | (31) 16156864                         |
| B32B 27/30                        | (73) Société des Produits Nestlé S.A. | (32) 23.02.2016                       |
| E04F 15/02                        | (72) IOTTI, Marco                     | (33) European Patent Office (EPO)     |
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| (47) 14.07.2021                   | (11) EP3542680                        | (21) EP16184448.5                     |
| (87) CN2012080488                 | (21) EP19159948.9                     | (47) 07.07.2021                       |
| 14.03.2013                        | (47) 07.07.2021                       | (22) 17.08.2016                       |
| (22) 23.08.2012                   | (22) 28.02.2019                       | (54) DEVICE FOR PREPARING A HOT       |
| (54) FLOOR MEMBER WITH HIGH       | (54) BREWING DEVICE                   | BEVERAGE AND USE OF SUCH              |
| FRICTION BOTTOM SURFACE           | (73) BSH Hausgeräte GmbH              | (73) Eugster/Frisomag AG              |
| (73) Tower IPCO Company Limited   | (72) Quittek, Benno                   | (72) Zwahlen, Christof                |
| (72) SUN, Qiong                   | Ostermaier, Albert                    | (31) 202015104399 U                   |
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| (32) 05.09.2011                   | (33) Germany                          | (51) A47J 31/58                       |
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| (51) A47J 27/04                   | (21) EP18733335.6                     | B65D 81/18                            |
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| 28.06.2018                        | (54) COMBINED ESPRESSO COFFEE         | (21) EP16783705.3                     |
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|                                   | (73) Schulthes, Thomas                | (87) US2016028329                     |

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| (22) 20.04.2016                                               | A47J 43/07                                                                                                                     | (21) EP16158630.0                                                                  |
| (54) THERMALLY REGULATED SELF-HEATING CONTAINERS              | (11) EP3669724                                                                                                                 | (47) 07.07.2021                                                                    |
| (73) Heatgenie, Inc.                                          | (21) EP18845879.8                                                                                                              | (22) 04.03.2016                                                                    |
| (72) COFFEY, Brendan                                          | (47) 07.07.2021                                                                                                                | (54) FOAMING SOAP PUMP                                                             |
| KWIATKOWSKI, Krzysztof C                                      | (87) KR2018009009                                                                                                              | (73) Simplehuman LLC                                                               |
| FORD, Brent C                                                 | 21.02.2019                                                                                                                     | (72) YANG, Frank                                                                   |
| (31) 201562149825 P                                           | (22) 08.08.2018                                                                                                                | YEN, Kenneth                                                                       |
| (32) 20.04.2015                                               | (54) STORAGE CONTAINER FOR VACUUM BLENDER WITH BACKFLOW PREVENTION FUNCTION                                                    | CHEN, Hon-Lun                                                                      |
| (33) United States of America                                 | (73) CTMC Co., Ltd.                                                                                                            | SANDOR, Joseph                                                                     |
| (51) A47J 36/24                                               | (72) CHUNG, Myoung Hwa                                                                                                         | WOLBERT, David                                                                     |
| A47J 43/046                                                   | (31) 20170104931                                                                                                               | COHEN, Guy                                                                         |
| A47J 43/07                                                    | (32) 18.08.2017                                                                                                                | PIRSHAFIEY, Nasser                                                                 |
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| (22) 16.05.2018                                               | (11) EP3525641                                                                                                                 | (51) A47K 5/12                                                                     |
| (54) FOOD PROCESSOR                                           | (21) EP17859725.8                                                                                                              | E01H 1/12                                                                          |
| (73) BSH Hausgeräte GmbH                                      | (47) 07.07.2021                                                                                                                | (11) EP3207181                                                                     |
| (72) Koscak, Ales                                             | (87) AU2017000217                                                                                                              | (21) EP15782059.8                                                                  |
| Uplaznik, Marko                                               | 19.04.2018                                                                                                                     | (47) 14.07.2021                                                                    |
| Zilnik, Marko                                                 | (22) 13.10.2017                                                                                                                | (87) GB2015052964                                                                  |
| (51) A47J 37/00                                               | (54) BENCH MIXER WHIPPING PROCESS MONITOR                                                                                      | 21.04.2016                                                                         |
| A47J 37/07                                                    | (73) Breville Pty Limited                                                                                                      | (22) 09.10.2015                                                                    |
| (11) EP3742946                                                | (72) THOMAS, Mark                                                                                                              | (54) CONTAINER AND DISPENSING DEVICE                                               |
| (21) EP19744466.4                                             | WIDANAGAMAGE DON, Lochana Subasekara                                                                                           | (73) Handipod Limited                                                              |
| (47) 07.07.2021                                               | (31) 2016904156                                                                                                                | (72) CARTLEDGE, Philip Vincent                                                     |
| (87) IB2019050608                                             | (32) 13.10.2016                                                                                                                | TAYLOR, Neil Paul                                                                  |
| 01.08.2019                                                    | (33) Australia                                                                                                                 | (31) 201418040                                                                     |
| (22) 24.01.2019                                               | (51) A47J 43/07                                                                                                                | (32) 13.10.2014                                                                    |
| (54) FOLDABLE GRILL                                           | (11) EP3090669                                                                                                                 | (33) United Kingdom                                                                |
| (73) Yasseen, Wael                                            | (21) EP16167959.2                                                                                                              | (51) A47K 5/14                                                                     |
| (72) Yasseen, Wael                                            | (47) 14.07.2021                                                                                                                | (11) EP3585225                                                                     |
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| (33) United States of America                                 | (73) Whirlpool Corporation                                                                                                     | (87) US2018019001                                                                  |
| (51) A47J 37/06                                               | (72) Lutz, Eric A.                                                                                                             | 30.08.2018                                                                         |
| (11) EP3687352                                                | Van Faasen, Joel G.                                                                                                            | (21) 21.02.2018                                                                    |
| (21) EP18793025.0                                             | McCormick, Arren J.                                                                                                            | (54) DISPENSERS, REFILL UNITS AND PUMPS HAVING VACUUM ACTUATED ANTIDRIP MECHANISMS |
| (47) 14.07.2021                                               | (31) 201514702978                                                                                                              | (73) GOJO Industries, Inc.                                                         |
| (87) IT2018050177                                             | (32) 04.05.2015                                                                                                                | (72) CIAVARELLA, Nick E.                                                           |
| 04.04.2019                                                    | (33) United States of America                                                                                                  | MARSHALL, Aaron D.                                                                 |
| (22) 27.09.2018                                               | (51) A47J 43/07                                                                                                                | HARRIS, Donald Russell                                                             |
| (54) AUTONOMOUS APPARATUS FOR COOKING FOOD AND COOKING METHOD | B01F 7/30                                                                                                                      | JENKINS, Dennis K.                                                                 |
| (73) De' Longhi Appliances S.r.l. Con Unico Socio             | (11) EP3488745                                                                                                                 | (31) 201762461907 P                                                                |
| (72) DE' LONGHI, Giuseppe                                     | (21) EP18207624.0                                                                                                              | (32) 22.02.2017                                                                    |
| MAZZON, Renzo                                                 | (47) 07.07.2021                                                                                                                | (33) United States of America                                                      |
| GALLINA, Luca                                                 | (22) 21.11.2018                                                                                                                | (51) A47L 5/12                                                                     |
| (31) 201700108342                                             | (54) KITCHEN APPLIANCE TOOL, PROCESSING ELEMENT FOR A KITCHEN APPLIANCE TOOL, KITCHEN APPLIANCE TOOL SET AND KITCHEN APPLIANCE | A47L 5/22                                                                          |
| (32) 27.09.2017                                               | (73) BSH Hausgeräte GmbH                                                                                                       | A47L 5/28                                                                          |
| (33) Italy                                                    | (72) Koscak, Ales                                                                                                              | A47L 5/30                                                                          |
| (51) A47J 37/07                                               | Orbanic, Henri                                                                                                                 | A47L 5/32                                                                          |
| (11) EP3398494                                                | Zilnik, Marko                                                                                                                  | A47L 5/34                                                                          |
| (21) EP18170823.1                                             | Uplaznik, Marko                                                                                                                | A47L 9/00                                                                          |
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| (54) BARBECUE                                                 | (33) Germany                                                                                                                   | A47L 9/12                                                                          |
| (73) Enders Colsman AG                                        | (51) A47K 5/12                                                                                                                 | A47L 9/14                                                                          |
| (72) GLOGER, Michael                                          | A47K 5/16                                                                                                                      | A47L 9/16                                                                          |
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| (47) 07.07.2021                                  | China                                    | (47) 14.07.2021                                  |
| (87) CN2016075610                                | China                                    | (87) CN2016075605                                |
| 15.06.2017                                       | China                                    | 15.06.2017                                       |
| (22) 04.03.2016                                  | China                                    | (22) 04.03.2016                                  |
| (54) UPRIGHT VACUUM CLEANER                      | China                                    | (54) UPRIGHT VACUUM CLEANER                      |
| (73) Jiangsu Midea Cleaning Appliances Co., Ltd. | China                                    | (73) Jiangsu Midea Cleaning Appliances Co., Ltd. |
| (72) HU, Wei                                     | China                                    | (72) HU, Wei                                     |
| ZOU, Hui                                         | China                                    | ZOU, Hui                                         |
| XIAO, Xiahu                                      | China                                    | XIAO, Xiahu                                      |
| (31) 201510917499                                | China                                    | (31) 201510917499                                |
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| 201510917466                                     | China                                    | 201510917466                                     |
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| 201521029087 U                                   | China                                    | 201521029087 U                                   |
| 201510918662                                     | China                                    | 201510918662                                     |
| 201521028812 U                                   | China                                    | 201521028812 U                                   |
| 201510918544                                     | China                                    | 201510918544                                     |
| 201521028739 U                                   | China                                    | 201521028739 U                                   |
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| 201521030034 U                                   | (54) SURFACE CLEANING APPARATUS          | 201521030034 U                                   |
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| (33) China                                       | F16D 23/12                               | (33) China                                       |
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| China                           | 20.05.2016                           | 13.10.2017                                    |
| China                           | 25.08.2016                           | (33) United States of America                 |
| China                           | 30.12.2016                           | United States of America                      |
| China                           | (33) Korea (Republic)                | United States of America                      |
| China                           | Korea (Republic)                     | (51) A47L 9/28                                |
| China                           | Korea (Republic)                     | G05D 1/02                                     |
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| China                           | (47) 07.07.2021                      | (22) 16.04.2015                               |
| China                           | (22) 16.11.2009                      | (54) AUTONOMOUS TRAVELING BODY                |
| China                           | (54) FLOOR TOOL FOR A CLEANING       | (73) Toshiba Lifestyle Products & Services    |
| China                           | APPLIANCE                            | Corporation                                   |
| China                           | (73) Dyson Technology Limited        | (72) WATANABE, Kota                           |
| China                           | (72) MCLEOD, David                   | IZAWA, Hirokazu                               |
| China                           | (31) 0823191                         | FURUTA, Kazuhiro                              |
| China                           | (32) 19.12.2008                      | MARUTANI, Yuuki                               |
| China                           | (33) United Kingdom                  | (31) 2014086811                               |
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| A47L 9/04                       | (47) 07.07.2021                      | A47L 11/40                                    |
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| A47L 11/24                      | (54) VACUUM CLEANER AND FLOOR        | (21) EP20177509.5                             |
| A47L 11/40                      | NOZZLE FOR VACUUM CLEANER            | (47) 07.07.2021                               |
| (11) EP3206551                  | (73) Miele & Cie. KG                 | (22) 29.05.2020                               |
| (21) EP15775721.2               | (72) Penner, Markus                  | (54) SELF-CLEANING FLOOR CLEANING             |
| (47) 14.07.2021                 | Rodax, Benjamin                      | MACHINE                                       |
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| 21.04.2016                      | (32) 27.06.2017                      | (72) Werner, Norbert                          |
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| A61B 5/024                         | (21) EP15844956.1                        | (54) A DEVICE FOR READ-OUT OF A    |
| A61B 5/11                          | (47) 07.07.2021                          | PHOTOPLETHYSMOGRAPHY SIGNAL        |
| A61B 5/145                         | (87) US2015046079                        | AND A WEARABLE SENSOR              |
| G01N 33/66                         | 31.03.2016                               | (73) Stichting IMEC Nederland      |
| (11) EP3294132                     | (22) 20.08.2015                          | IMEC vzw                           |
| (21) EP16792846.4                  | (54) METHODS AND APPARATUS FOR           | (72) SONG, Shuang                  |
| (47) 07.07.2021                    | IMPROVING SIGNAL QUALITY IN              | XU, Jiawei                         |
| (87) KR2016003298                  | WEARABLE BIOMETRIC MONITORING            | VAN WEGBERG, Roland                |
| 17.11.2016                         | DEVICES                                  | VAN HELLEPUTTE, Nick               |
| (22) 31.03.2016                    | (73) Valencell, Inc.                     | (51) A61B 5/00                     |
| (54) BLOOD GLUCOSE MEASUREMENT     | (72) AUMER, Michael Edward               | A61B 5/026                         |
| APPARATUS AND BLOOD GLUCOSE        | LEBOEUF, Steven, Francis                 | (11) EP3410925                     |
| MEASUREMENT METHOD THEREOF         | (31) 201462056510 P                      | (21) EP17705969.8                  |
| (73) Samsung Electronics Co., Ltd. | 201562110655 P                           | (47) 07.07.2021                    |
| (72) CHOI, Hyoung-Seon             | 201514829032                             | (87) SE2017050083                  |
| CHO, Chul-Ho                       | (32) 27.09.2014                          | 10.08.2017                         |
| CHO, Seong-Je                      | 02.02.2015                               | (22) 02.02.2017                    |
| KIM, Kwang-Bok                     | 18.08.2015                               | (54) OPTICAL PROBE FOR LOCALIZING  |
| LEE, Seung-Min                     | (33) United States of America            | AND IDENTIFYING A TARGET TISSUE    |
| JUNG, Sun-Tae                      | United States of America                 | PRIOR TO HARVESTING A BIOPSY       |
| CHO, Jae-geol                      | United States of America                 | (73) FluoLink AB                   |
| (31) 201562160351 P                | (51) A61B 5/00                           | (72) Haj-Hosseini, Neda            |
| 20150117340                        | A61B 5/024                               | Wårdell, Karin                     |
| (32) 12.05.2015                    | A61B 5/0245                              | Richter, Johan                     |
| 20.08.2015                         | A61B 5/0402                              | (31) 1600030                       |
| (33) United States of America      | A61B 5/11                                | (32) 05.02.2016                    |
| Korea (Republic)                   | A61B 5/22                                | (33) Sweden                        |
| (51) A61B 5/00                     | (11) EP3158928                           | (51) A61B 5/00                     |
| A61B 5/0205                        | (21) EP16170397.0                        | A61B 5/026                         |
| A61B 5/117                         | (47) 07.07.2021                          | A61B 5/0275                        |
| A61B 5/053                         | (22) 19.05.2016                          | A61B 5/0295                        |
| A61B 5/0531                        | (54) STAMINA MONITORING METHOD AND       | (11) EP3203902                     |
| (11) EP3513713                     | DEVICE                                   | (21) EP14903635.2                  |
| (21) EP19159629.5                  | (73) bOMDIC Inc.                         | (47) 07.07.2021                    |
| (47) 07.07.2021                    | (72) CHENG, Shih-Heng                    | (87) IB2014065189                  |
| (22) 01.08.2014                    | KUO, Hsin-Fu                             | 14.04.2016                         |
| (54) WEARABLE MOBILE DEVICE        | (31) 201514718104                        | (22) 09.10.2014                    |
| AND METHOD OF MEASURING            | (32) 21.05.2015                          | (54) QUANTIFICATION OF ABSOLUTE    |
| BIOLOGICAL SIGNAL WITH THE SAME    | (33) United States of America            | BLOOD FLOW IN TISSUE USING         |
| (73) Samsung Electronics Co., Ltd. | (51) A61B 5/00                           | FLUORESCENCE-MEDIATED              |
| (72) CHOI, Chang Mok               | A61B 5/024                               | PHOTOPLETHYSMOGRAPHY               |
| KIM, Sang Joon                     | A61B 5/026                               | (73) Novadaq Technologies ULC      |
| PARK, Sang Il                      | A61B 5/1455                              | (72) FLOWER, Robert W.             |
| LEE, Se O                          | (11) EP2609854                           | STEAD, Robert Anthony              |
| JUN, Young Joong                   | (21) EP12199633.4                        | BAILEY, Arthur E.                  |
| (31) 20130144550                   | (47) 14.07.2021                          | (51) A61B 5/00                     |
| (32) 26.11.2013                    | (22) 28.12.2012                          | A61B 5/0488                        |
| (33) Korea (Republic)              | (54) Movement correlated method and      | A61B 5/11                          |
| (51) A61B 5/00                     | optoelectronic device for non-invasive   | A61B 5/22                          |
| A61B 5/021                         | determination of the dermal venous       | G06F 1/16                          |
| A61B 5/0215                        | oxygen supply to peripheral areas of the | G06F 3/01                          |
| A61B 5/352                         | leg                                      | G06F 13/14                         |
| (11) EP2979629                     | (73) Blazek, Vladimir                    | G06F 3/0346                        |
| (21) EP15176563.3                  | (72) Blazek, Vladimir                    | G06F 9/44                          |
| (47) 07.07.2021                    | Blazek, Claudia R.                       | (11) EP3037919                     |
| (22) 14.07.2015                    | (31) 102011122700                        | (21) EP14838613.9                  |
| (54) BIOLOGICAL INFORMATION        | (32) 31.12.2011                          | (47) 07.07.2021                    |
| MEASURING APPARATUS AND            | (33) Germany                             | (87) KR2014004073                  |
| PROGRAM                            | (51) A61B 5/00                           | 26.02.2015                         |
| (73) Nihon Kohden Corporation      | A61B 5/024                               | (22) 08.05.2014                    |
| (72) KUBO, Hiroshi                 | A61B 5/1455                              | (54) WEARABLE BIOSIGNAL INTERFACE  |
| KOYAMA, Yukio                      | H03F 3/08                                | AND METHOD OF OPERATING            |
| (31) 2014155481                    | (11) EP3666180                           | WEARABLE BIOSIGNAL INTERFACE       |
| (32) 30.07.2014                    | (21) EP18212678.9                        | (73) Samsung Electronics Co., Ltd. |
| (33) Japan                         | (47) 14.07.2021                          | (72) CHOI, Chang Mok               |
| (51) A61B 5/00                     | (22) 14.12.2018                          | KIM, Sang Joon                     |
| A61B 5/024                         |                                          | YOON, Seung Keun                   |
| (11) EP3171767                     |                                          | (31) 20130098476                   |

|                                                |                                             |                                     |
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| (32) 20.08.2013                                | 19.04.2018                                  | (51) A61B 5/00                      |
| (33) Korea (Republic)                          | (22) 11.10.2017                             | A61B 5/087                          |
| (51) A61B 5/00                                 | (54) APPARATUS FOR NAVIGATING A             | (11) EP3454739                      |
| A61B 5/0488                                    | MEDICAL DEVICE                              | (21) EP17722740.2                   |
| A61N 1/36                                      | (73) St. Jude Medical, Cardiology Division, | (47) 07.07.2021                     |
| (11) EP3439735                                 | Inc.                                        | (87) EP2017060978                   |
| (21) EP17716341.7                              | (72) RICHER, Louis-Philippe                 | 16.11.2017                          |
| (47) 07.07.2021                                | ROSENBERG, Stuart                           | (22) 09.05.2017                     |
| (87) US2017024075                              | RELAN, Jatin                                | (54) DETERMINING AN AIRWAY FLOW     |
| 12.10.2017                                     | RYU, Kyungmoo                               | LIMITATION VALUE                    |
| (22) 24.03.2017                                | (31) 201662406450 P                         | (73) Koninklijke Philips N.V.       |
| (54) SYSTEM TO ESTIMATE THE                    | (32) 11.10.2016                             | (72) ROMANO, Robert                 |
| LOCATION OF A SPINAL CORD                      | (33) United States of America               | MCDERMOTT, Mark, Christopher        |
| PHYSIOLOGICAL MIDLINE                          | (51) A61B 5/00                              | HILL, Peter, Douglas                |
| (73) Boston Scientific Neuromodulation         | A61B 5/06                                   | BATES, Richard, Anthony             |
| Corporation                                    | A61B 5/367                                  | (31) 201662334066 P                 |
| (72) SERRANO CARMONA, Raul                     | (11) EP3656301                              | (32) 10.05.2016                     |
| HERSHEY, Bradley                               | (21) EP19210964.3                           | (33) United States of America       |
| (31) 201662317877 P                            | (47) 07.07.2021                             | (51) A61B 5/00                      |
| 201715467390                                   | (22) 22.11.2019                             | A61B 5/103                          |
| (32) 04.04.2016                                | (54) COMPENSATING FOR ARTIFACTS             | A61B 5/107                          |
| 23.03.2017                                     | WHILE TRACKING AN INTRABODY                 | H04N 1/407                          |
| (33) United States of America                  | PROBE                                       | (11) EP3251332                      |
| United States of America                       | (73) Biosense Webster (Israel) Ltd.         | (21) EP16742882.0                   |
| (51) A61B 5/00                                 | (72) ALTMANN, Andres Claudio                | (47) 07.07.2021                     |
| A61B 5/055                                     | GOVARI, Assaf                               | (87) IL2016050069                   |
| G01R 33/48                                     | GLINER, Vadim                               | 04.08.2016                          |
| G01R 33/563                                    | (31) 201816198933                           | (22) 21.01.2016                     |
| G06T 7/11                                      | (32) 23.11.2018                             | (54) MEASURING AND MONITORING SKIN  |
| G06T 7/33                                      | (33) United States of America               | FEATURE COLORS, FORM AND SIZE       |
| (11) EP3247269                                 | (51) A61B 5/00                              | (73) Healthy.IO Ltd                 |
| (21) EP16701107.1                              | A61B 5/07                                   | (72) ADIRI, Yonatan                 |
| (47) 07.07.2021                                | A61B 5/145                                  | OMER, Ido                           |
| (87) EP2016050882                              | A61B 5/1455                                 | MENDELOWITZ, Shachar                |
| 28.07.2016                                     | A61B 5/1459                                 | SALOMON, Roeie                      |
| (22) 18.01.2016                                | (11) EP2811905                              | (31) 201562108097 P                 |
| (54) TISSUE-ORIENTATION-BASED                  | (21) EP13746780.9                           | (32) 27.01.2015                     |
| SIMULATION OF DEEP BRAIN                       | (47) 07.07.2021                             | (33) United States of America       |
| STIMULATION                                    | (87) US2013025346                           | (51) A61B 5/00                      |
| (73) Brainlab AG                               | 15.08.2013                                  | A61B 5/103                          |
| (72) VARKUTI, Bálint                           | (22) 08.02.2013                             | A61B 5/11                           |
| (31) PCT/EP2015/050862                         | (54) DIGITAL ASIC SENSOR PLATFORM           | (11) EP3251589                      |
| (32) 19.01.2015                                | (73) Senseonics, Incorporated               | (21) EP17173144.1                   |
| (33) World Intellectual Property Office (WIPO) | (72) DEHENNIS, Andrew                       | (47) 07.07.2021                     |
| (51) A61B 5/00                                 | COLVIN, Arthur, E.                          | (22) 26.05.2017                     |
| A61B 5/055                                     | (31) 201261597496 P                         | (54) ROBOTIC KNEE TESTING APPARATUS |
| G06T 7/00                                      | (32) 10.02.2012                             | AND PATIENT AND APPARATUS SET-      |
| (11) EP3269301                                 | (33) United States of America               | UP METHODS                          |
| (21) EP15884728.5                              | (51) A61B 5/00                              | (73) RoboDiagnostics LLC            |
| (47) 14.07.2021                                | A61B 5/08                                   | (72) BRANCH, Thomas P               |
| (87) KR2015002420                              | A61B 5/091                                  | STINTON, Shaun K                    |
| 15.09.2016                                     | A61M 16/00                                  | DITTMAR, Edward                     |
| (22) 12.03.2015                                | A61B 5/389                                  | DEJARNETTE, Nathaniel K             |
| (54) METHOD FOR ESTIMATING TIME OF             | (11) EP3397330                              | MADDEN, T. Christopher              |
| OCCURRENCE OF INFARCT ON BASIS                 | (21) EP16880225.4                           | (31) 201615173536                   |
| OF BRAIN IMAGE                                 | (47) 07.07.2021                             | (32) 03.06.2016                     |
| (73) The Asan Foundation                       | (87) CA2016051549                           | (33) United States of America       |
| (72) KIM, Nam Kug                              | 06.07.2017                                  | (51) A61B 5/00                      |
| KANG, Dong Wha                                 | (22) 29.12.2016                             | A61B 5/11                           |
| (51) A61B 5/00                                 | (54) DEVICE AND METHOD FOR                  | (11) EP3200693                      |
| A61B 5/06                                      | CONTROLLING VENTILATORY ASSIST              | (21) EP15791335.1                   |
| A61B 5/107                                     | (73) St. Michael's Hospital                 | (47) 07.07.2021                     |
| A61M 25/09                                     | (72) SINDERBY, Christer                     | (87) GB2015052836                   |
| A61B 34/20                                     | BECK, Jennifer                              | 07.04.2016                          |
| (11) EP3503832                                 | COMTOIS, Norman                             | (22) 29.09.2015                     |
| (21) EP17791519.6                              | (31) 201562273527 P                         | (54) MAPPING THE TRAJECTORY OF A    |
| (47) 07.07.2021                                | (32) 31.12.2015                             | PART OF THE ANATOMY OF THE          |
| (87) US2017056086                              | (33) United States of America               | HUMAN OR ANIMAL BODY                |

|                                    |                                            |                                              |
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| (73) 270 Vision Ltd                | Kim, Sehoon                                | CHEN, Shigao                                 |
| (72) GOSSLING, Martin              | Kim, Jungmo                                | (31) 201562238891 P                          |
| VAANANEN, Johannes                 | Han, Jooman                                | (32) 08.10.2015                              |
| (31) 201417282                     | Ahn, Choonghee                             | (33) United States of America                |
| (32) 30.09.2014                    | Han, Jeongyup                              | (51) A61B 5/00                               |
| (33) United Kingdom                | Kim, Taeho                                 | A61B 8/00                                    |
| (51) A61B 5/00                     | Park, Jeongmin                             | A61B 8/08                                    |
| A61B 5/11                          | Lee, Seungeun                              | A61B 8/12                                    |
| A61B 5/22                          | (31) 20170038756                           | (11) EP2481354                               |
| G01C 9/00                          | (32) 27.03.2017                            | (21) EP11007978.7                            |
| G01C 21/12                         | (33) Korea (Republic)                      | (47) 07.07.2021                              |
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| (21) EP17706285.8                  | A61B 7/00                                  | (54) Ultrasound elasticity imaging apparatus |
| (47) 14.07.2021                    | (11) EP3562402                             | and method                                   |
| (87) FR2017050147                  | (21) EP17825545.1                          | (73) Hitachi, Ltd.                           |
| 03.08.2017                         | (47) 14.07.2021                            | (72) Osaka, Takashi                          |
| (22) 24.01.2017                    | (87) EP2017084597                          | Matsumura, Takeshi                           |
| (54) METHOD FOR ESTIMATING THE     | 05.07.2018                                 | Hayashi, Tetsuya                             |
| PHYSICAL ACTIVITY OF AN UPPER      | (22) 27.12.2017                            | Oshiki, Mitsuhiro                            |
| LIMB                               | (54) METHOD OF CHARACTERIZING              | Yuasa, Okinori                               |
| (73) SYSNAV                        | SLEEP DISORDERED BREATHING                 | Murayama, Naoyuki                            |
| Association Institut de Myologie   | (73) Koninklijke Philips N.V.              | Shiina, Tsuyoshi                             |
| (72) GRELET, Marc                  | (72) DEN BRINKER, Albertus Cornelis        | Tamano, Satoshi                              |
| DORVEAUX, Eric                     | OUWELTJES, Okke                            | Mitake, Tsuyoshi                             |
| VISSIERE, David                    | KOHLRAUSCH, Armin Gerhard                  | (31) 2003154349                              |
| SERVAIS, Laurent                   | (31) 201662439508 P                        | 2003178685                                   |
| HOGREL, Jean- Yves                 | (32) 28.12.2016                            | 2003354231                                   |
| MORAU, Amélie                      | (33) United States of America              | (32) 30.05.2003                              |
| (31) 1650652                       | (51) A61B 5/00                             | 23.06.2003                                   |
| (32) 27.01.2016                    | A61B 7/00                                  | 14.10.2003                                   |
| (33) France                        | H04W 4/00                                  | (33) Japan                                   |
| (51) A61B 5/00                     | H04W 4/38                                  | Japan                                        |
| A61B 5/145                         | H04W 4/80                                  | Japan                                        |
| A61K 38/28                         | (11) EP3560219                             | (51) A61B 5/00                               |
| A61M 5/168                         | (21) EP17884995.6                          | A61B 18/20                                   |
| G16H 10/40                         | (47) 07.07.2021                            | (11) EP3487386                               |
| G16H 20/10                         | (87) US2017067337                          | (21) EP17754404.6                            |
| G16H 20/17                         | 28.06.2018                                 | (47) 07.07.2021                              |
| G16H 50/20                         | (22) 19.12.2017                            | (87) FR2017052012                            |
| (11) EP3359039                     | (54) ENHANCED WIRELESS                     | 25.01.2018                                   |
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| (47) 14.07.2021                    | DEVICES                                    | (54) DERMATOLOGICAL DIAGNOSIS AND            |
| (87) SE2016050966                  | (73) Eko Devices, Inc.                     | TREATMENT SYSTEM                             |
| 13.04.2017                         | (72) LANDGRAF, Connor                      | (73) Université de Bordeaux                  |
| (22) 07.10.2016                    | GERSHTEIN, Eugene                          | Centre National de la Recherche              |
| (54) MEDICAL ARRANGEMENTS AND      | CROUCH, Tyler                              | Scientifique                                 |
| A METHOD FOR DETERMINING           | (31) 201615384506                          | Irisiome                                     |
| PARAMETERS RELATED TO              | (32) 20.12.2016                            | Institut d'Optique Graduate School           |
| INSULIN THERAPY, PREDICTING        | (33) United States of America              | Commissariat à l'Energie Atomique et         |
| GLUCOSE VALUES AND FOR             | (51) A61B 5/00                             | aux Energies Alternatives                    |
| PROVIDING INSULIN DOSING           | A61B 8/00                                  | (72) ROYON, Romain                           |
| RECOMMENDATIONS                    | A61B 8/08                                  | SANTARELLI, Giorgio                          |
| (73) Dianovator AB                 | (11) EP3359047                             | LHERMITE, Jérôme                             |
| (72) STÄHL, Fredrik                | (21) EP16854283.5                          | DUBRASQUET, Romain                           |
| (31) 1530154                       | (47) 14.07.2021                            | (31) 1657051                                 |
| (32) 09.10.2015                    | (87) US2016055649                          | (32) 22.07.2016                              |
| (33) Sweden                        | 13.04.2017                                 | (33) France                                  |
| (51) A61B 5/00                     | (22) 06.10.2016                            | (51) A61B 5/00                               |
| A61B 5/1455                        | (54) METHODS FOR ULTRASOUND                | A61F 5/44                                    |
| (11) EP3381369                     | ELASTOGRAPHY WITH CONTINUOUS               | A61F 13/42                                   |
| (21) EP18162823.1                  | TRANSDUCER VIBRATION                       | (11) EP3135188                               |
| (47) 14.07.2021                    | (73) Mayo Foundation for Medical Education | (21) EP16180783.9                            |
| (22) 20.03.2018                    | and Research                               | (47) 07.07.2021                              |
| (54) ELECTRONIC DEVICE AND METHOD  | (72) MELLEMA, Daniel C.                    | (22) 22.07.2016                              |
| FOR MEASURING BIOMETRIC            | SONG, Pengfei                              | (54) HEALTH MONITORING DEVICE                |
| INFORMATION                        | URBAN, Matthew W.                          | (73) NXP B.V.                                |
| (73) Samsung Electronics Co., Ltd. | MANDUCA, Armando                           | (72) THOEN, Steven Mark                      |
| (72) Kim, Jihwan                   | GREENLEAF, James F.                        | (31) 201514836703                            |



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| (33) United States of America              | (11) EP3025173                          | (11) EP3489851                         |
| (51) A61B 5/00                             | (21) EP14829890.4                       | (21) EP18206538.3                      |
| A61M 1/14                                  | (47) 07.07.2021                         | (47) 07.07.2021                        |
| A61M 21/02                                 | (87) US2014048256                       | (22) 15.11.2018                        |
| G10K 11/178                                | 29.01.2015                              | (54) IDENTIFICATION DEVICE AND         |
| (11) EP3678723                             | (22) 25.07.2014                         | IDENTIFICATION METHOD                  |
| (21) EP18778702.3                          | (54) APPARATUS WITH A LASER             | (73) Panasonic Intellectual Property   |
| (47) 07.07.2021                            | ARRANGEMENT UTILIZING OPTICAL           | Management Co., Ltd.                   |
| (87) US2018049352                          | DISPERSION FOR APPLICATIONS             | (72) NAKAYAMA, Takeshi                 |
| 14.03.2019                                 | IN FOURIER-DOMAIN OPTICAL               | IIZUKA, Shoichi                        |
| (22) 04.09.2018                            | COHERENCE TOMOGRAPHY                    | HONMA, Naoki                           |
| (54) MASKING NOISES FROM DIALYSIS          | (73) The General Hospital Corporation   | SASAKAWA, Dai                          |
| MACHINES                                   | (72) VAKOC, Benjamin                    | (31) 2017223430                        |
| (73) Fresenius Medical Care Holdings, Inc. | SIDDIQUI, Meena                         | 2018105032                             |
| (72) MOSS, Jon, F.                         | TOZBURUN, Serhat                        | (32) 21.11.2017                        |
| EGLEY, Bert, D.                            | (31) 201361858808 P                     | 31.05.2018                             |
| SCHMIDT, Daniel, H.                        | (32) 26.07.2013                         | (33) Japan                             |
| (31) 201715695247                          | (33) United States of America           | Japan                                  |
| (32) 05.09.2017                            | (51) A61B 5/00                          | (51) A61B 5/01                         |
| (33) United States of America              | G01D 1/14                               | A61B 5/021                             |
| (51) A61B 5/00                             | G01D 1/18                               | G06F 1/16                              |
| A61M 16/00                                 | H04L 29/08                              | G06F 13/38                             |
| A61B 5/053                                 | (11) EP3339810                          | (11) EP3304245                         |
| (11) EP3628221                             | (21) EP17208285.1                       | (21) EP16800491.9                      |
| (21) EP19401034.4                          | (47) 14.07.2021                         | (47) 14.07.2021                        |
| (47) 07.07.2021                            | (22) 19.12.2017                         | (87) US2016032009                      |
| (22) 17.09.2019                            | (54) DETECTING TRIGGER CONDITIONS       | 01.12.2016                             |
| (54) LUNG VENTILATION DETECTING            | TO DYNAMICALLY UPDATE A MODEL           | (22) 12.05.2016                        |
| DEVICE                                     | BASED ON SENSOR DATA IN A FOG           | (54) WEARABLE USB DEVICE ASSEMBLY      |
| (73) Löwenstein Medical Technology S.A.    | COMPUTING ENVIRONMENT                   | (73) Nike Innovate C.V.                |
| (72) Kremeier, Peter                       | (73) Accenture Global Solutions Limited | (72) BAILLY, Devin                     |
| (31) 102018007602                          | (72) MAITRA, Anutosh                    | FOLSKE, Keith                          |
| (32) 26.09.2018                            | KUNTAGOD, Nataraj                       | PHEIL, Holli                           |
| (33) Germany                               | KUMARESAN, Senthil Kumar                | SCHNEIDER, Summer                      |
| (51) A61B 5/00                             | SRINIVAS SAI, Satya                     | (31) 201514723901                      |
| C09K 11/77                                 | (31) 201641044000                       | (32) 28.05.2015                        |
| H05B 33/14                                 | 201715822883                            | (33) United States of America          |
| F21K 9/64                                  | (32) 23.12.2016                         | (51) A61B 5/01                         |
| F21K 99/00                                 | 27.11.2017                              | A61B 5/087                             |
| F21Y 115/10                                | (33) India                              | A61F 7/12                              |
| F21Y 115/15                                | United States of America                | A61M 16/00                             |
| F21Y 115/30                                | (51) A61B 5/00                          | A61M 16/04                             |
| F21S 41/14                                 | G06F 3/01                               | A61M 16/08                             |
| F21S 41/16                                 | (11) EP2652578                          | A61M 19/00                             |
| F21S 41/176                                | (21) EP11848553.1                       | (11) EP3049043                         |
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| (22) 28.04.2016                            | WITH MODES OF OPERATION OF AN           | (54) INDIRECT PRESSURE AND             |
| (54) HIGH INTENSITY LIGHT SOURCE           | APPARATUS                               | TEMPERATURE MEASUREMENT IN A           |
| WITH TEMPERATURE INDEPENDENT               | (73) Nokia Technologies Oy              | TOTAL LIQUID VENTILATION SYSTEM        |
| COLOR POINT                                | (72) KANGAS, Jari                       | (73) Socpra Sciences Et Genie S. E. C. |
| (73) Lumileds LLC                          | KÄRKKÄINEN, Leo                         | (72) NADEAU, Mathieu                   |
| (72) HIKMET, Rifat, Ata, Mustafa           | NURMI, Mikko                            | MICHEAU, Philippe                      |
| HOHN, Roman                                | OJANEN, Ville                           | ROBERT, Raymond                        |
| (31) 15166786                              | SALMINEN, Ilkka                         | WALTI, Herve                           |
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| H01S 3/081                                 | G06K 9/00                               | A61B 18/00                             |
| H01S 3/106                                 | G06F 21/32                              | A61B 18/08                             |
| H01S 3/11                                  | A61B 5/117                              | A61B 18/10                             |

|                                              |                                            |                                     |
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| A61B 18/12                                   | (54) SYSTEM FOR MONITORING A               | (33) United States of America       |
| A61B 18/14                                   | VEHICLE DRIVER                             | (51) A61B 5/055                     |
| A61B 5/0538                                  | (73) Joyson Safety Systems Acquisition LLC | G01R 33/56                          |
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| HASSE, Michelle                              | (11) EP3125751                             | CORRECTION                          |
| WANKE, Tyler                                 | (21) EP15732036.7                          | (73) Imaging Biometrics             |
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| SEVILLA, Galo Andres Torres                  | F16K 7/17                                  | (54) SYSTEMS AND METHODS FOR        |
| HUSSAIN, Muhammad Mustafa                    | F16K 11/22                                 | DETECTING MAGNETIC MARKERS          |
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| (47) 07.07.2021                              | Omron Healthcare Co., Ltd.                 | A61B 5/113                          |
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| SCHAAP, Michiel                              | (51) A61B 5/055                            | A BREATHING MOTION, COMPUTER        |
| TAYLOR, Charles A.                           | A61B 6/03                                  | PROGRAM, COMPUTER READABLE          |
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| G06K 9/00                                    | ANATOMICAL LANDMARKS IN IMAGE              | (51) A61B 5/08                      |
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| (54) OSCILLATORY DARK-FIELD IMAGING                                                                        | (31) 201161490191 P                                                                            | RUTH, Christopher                                                                                      |
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| (72) HLADIO, Andre Novomir                                                                                 | (73) Terumo Kabushiki Kaisha                                                                   | Yoshikawa, Hideki                                                                                      |
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| A61B 90/50                                                                                                 | (73) Tata Consultancy Services Limited                                                         | (73) General Electric Company                                                                          |
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| (73) Hologic, Inc.                       | IN THE PRESENCE OF MOTION                    | (73) Samsung Medison Co., Ltd.    |
| (72) VARTOLONE, Joseph                   | (73) Dental Imaging Technologies Corporation | (72) Lee, Yujin                   |
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| RAY TOMOGRAPHY METHOD                    | RAY SOURCE                                   | THE SAME                          |
| (73) J. Morita Manufacturing Corporation | (73) Siemens Healthcare GmbH                 | (73) Samsung Medison Co., Ltd.    |
| (72) SADAKANE, Tomoyuki                  | (72) FÜRSTENBERG, Dieter                     | (72) YANG, Sun-Mo                 |
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| (72) GRÖNBERG, Fredrik                   | (47) 14.07.2021                              | (11) EP3755232                    |
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| (73) The Johns Hopkins University        | (32) 13.08.2012                              | CHEN, Alvin                       |
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| (21) EP10833718.9                        | (47) 14.07.2021                              | (51) A61B 8/08                    |
| (47) 07.07.2021                          | (22) 15.02.2019                              | (11) EP3653131                    |
| (87) US2010046834                        |                                              | (21) EP19206597.7                 |

|                                  |                                  |                                       |
|----------------------------------|----------------------------------|---------------------------------------|
| (47) 14.07.2021                  | AKRAM, Ismail                    | BRADY, John E.                        |
| (22) 31.10.2019                  | GOLDREIN, Howell T.              | JENKINS, Scott A.                     |
| (54) ULTRASOUND DIAGNOSIS        | (31) 201615130575                | SCHOETTMER, Laura A.                  |
| APPARATUS FOR DETERMINING        | (32) 15.04.2016                  | KOLPITCKE, Andrew                     |
| ABNORMALITY OF FETAL HEART, AND  | (33) United States of America    | MORGAN, Joshua P.                     |
| OPERATING METHOD THEREOF         | (51) A61B 17/00                  | WORTHINGTON, Sarah A.                 |
| (73) Samsung Medison Co., Ltd.   | A61B 17/072                      | ARONHALT, Taylor W.                   |
| (72) Park, Sungwook              | A61B 17/29                       | CUTI, Alexander R.                    |
| Lee, Jinyong                     | A61B 90/00                       | (31) 201815934166                     |
| (31) 20180141136                 | A61B 90/30                       | (32) 23.03.2018                       |
| (32) 15.11.2018                  | G16H 20/40                       | (33) United States of America         |
| (33) Korea (Republic)            | G16H 40/63                       | (51) A61B 17/00                       |
| (51) A61B 17/00                  | A61B 5/053                       | A61B 17/11                            |
| A61B 17/072                      | (11) EP3231375                   | A61B 17/22                            |
| A61B 17/115                      | (21) EP17166586.2                | A61B 17/32                            |
| A61B 17/16                       | (47) 14.07.2021                  | A61B 17/3207                          |
| B23B 31/107                      | (22) 13.04.2017                  | A61B 17/34                            |
| (11) EP3143949                   | (54) SURGICAL INSTRUMENT WITH    | A61M 25/09                            |
| (21) EP16189648.5                | IMPROVED STOP/START CONTROL      | A61B 90/00                            |
| (47) 14.07.2021                  | DURING A FIRING MOTION           | (11) EP3626187                        |
| (22) 20.09.2016                  | (73) Ethicon LLC                 | (21) EP19203256.3                     |
| (54) LOADING UNIT LOCKING COLLAR | (72) SHELTON, IV, Frederick E.   | (47) 14.07.2021                       |
| WITH ROTATIONAL ACTUATED         | HARRIS, Jason L.                 | (22) 07.08.2009                       |
| RELEASE                          | (31) 201615130588                | (54) ENDOVASCULAR DEVICE WITH A       |
| (73) Covidien LP                 | (32) 15.04.2016                  | TISSUE PIERCING DISTAL PROBE          |
| (72) Sgroi, Jr., Anthony         | (33) United States of America    | (73) Bridgepoint Medical, Inc.        |
| (31) 201514859590                | (51) A61B 17/00                  | (72) Olson, Matthew Jonathan          |
| (32) 21.09.2015                  | A61B 17/072                      | Kugler, Chad John                     |
| (33) United States of America    | G01H 1/00                        | Olson, Ross Arlen                     |
| (51) A61B 17/00                  | G01H 3/00                        | Robinson, David B.                    |
| A61B 17/072                      | G01H 17/00                       | Jacobs, Peter Alan                    |
| A61B 17/29                       | G01M 13/045                      | (31) 104868 P                         |
| A61B 17/32                       | (11) EP3205282                   | 461261                                |
| A61B 90/00                       | (21) EP17155675.6                | (32) 13.10.2008                       |
| (11) EP3363390                   | (47) 07.07.2021                  | 05.08.2009                            |
| (21) EP18157228.0                | (22) 10.02.2017                  | (33) United States of America         |
| (47) 14.07.2021                  | (54) MECHANISMS FOR COMPENSATING | United States of America              |
| (22) 16.02.2018                  | FOR DRIVETRAIN FAILURE IN        | (51) A61B 17/00                       |
| (54) SURGICAL STAPLER WITH       | POWERED SURGICAL INSTRUMENTS     | A61B 17/12                            |
| ELASTICALLY DEFORMABLE TIP       | (73) Ethicon LLC                 | (11) EP3223720                        |
| (73) Ethicon LLC                 | (72) SHELTON, IV, Frederick E.   | (21) EP15862863.6                     |
| (72) HARRIS, Jason L.            | OVERMYER, Mark D.                | (47) 07.07.2021                       |
| BLEDSE, Ryan                     | YATES, David C.                  | (87) US2015062462                     |
| BAKOS, Gregory J.                | HARRIS, Jason L.                 | 02.06.2016                            |
| SCHOWALTER, Joseph P.            | (31) 201615043254                | (22) 24.11.2015                       |
| SHELTON, IV, Frederick E.        | (32) 12.02.2016                  | (54) TISSUE LIGATION APPARATUS WITH A |
| (31) 201715435573                | (33) United States of America    | ROTATING SPOOL ASSEMBLY AND A         |
| (32) 17.02.2017                  | (51) A61B 17/00                  | VALVE ASSEMBLY                        |
| (33) United States of America    | A61B 17/072                      | (73) Intelligent Endoscopy LLC        |
| (51) A61B 17/00                  | H01R 3/08                        | (72) HALLER, Fritz                    |
| A61B 17/072                      | H01R 4/2404                      | CLARK, Melissa                        |
| A61B 17/29                       | (11) EP3542731                   | SKELTON, Eugene                       |
| A61B 90/00                       | (21) EP19164690.0                | WRIGHT, Anthony                       |
| A61B 90/30                       | (47) 14.07.2021                  | CORNER, Darren                        |
| (11) EP3231379                   | (22) 22.03.2019                  | (31) 201462085272 P                   |
| (21) EP17166647.2                | (54) SURGICAL INSTRUMENT WITH    | (32) 27.11.2014                       |
| (47) 14.07.2021                  | ELECTRICAL CONTACT UNDER         | (33) United States of America         |
| (22) 13.04.2017                  | MEMBRANE                         | (51) A61B 17/00                       |
| (54) STAPLE FORMATION DETECTION  | (73) Ethicon LLC                 | A61B 17/16                            |
| MECHANISMS                       | (72) BAKOS, Gregory J.           | A61B 17/56                            |
| (73) Ethicon LLC                 | SHELTON IV, Frederick E.         | A61B 17/88                            |
| (72) VENDELY, Michael J.         | SCOTT, Gregory G.                | A61B 18/00                            |
| SCHEIB, Charles J.               | GERESY, Stephen D.               | A61B 18/14                            |
| SHELTON, IV, Frederick E.        | NGUETIO TCHOMUNKEU, Yvan D.      | A61B 18/18                            |
| HARRIS, Jason L.                 | KRUMM, Amy M.                    | A61B 5/053                            |
| MOIR, Robert S.                  | WATERS, Grace E.                 | (11) EP2978373                        |
| CONSONNI, Sofia Maria            | VULHOP, Prudence A.              | (21) EP14772615.2                     |
| SAMS, Stephen                    | KWEE, Nichole Y.                 | (47) 14.07.2021                       |

|                                                                                                                                             |                                                                           |                               |
|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------|
| (87) US2014032051<br>02.10.2014                                                                                                             | (33) United States of America<br>United States of America                 | 28.02.2018<br>28.03.2018      |
| (22) 27.03.2014                                                                                                                             | (51) A61B 17/00                                                           | 28.03.2018                    |
| (54) SYSTEM FOR USE IN TREATMENT OF<br>VERTEBRAL FRACTURES                                                                                  | A61B 17/29                                                                | 28.03.2018                    |
| (73) Dfine, Inc.                                                                                                                            | (11) EP3488801                                                            | 28.03.2018                    |
| (72) GERMAIN, Aaron                                                                                                                         | (21) EP18203342.3                                                         | 28.03.2018                    |
| (31) 201313853397                                                                                                                           | (47) 14.07.2021                                                           | 28.03.2018                    |
| (32) 29.03.2013                                                                                                                             | (22) 30.10.2018                                                           | 28.03.2018                    |
| (33) United States of America                                                                                                               | (54) SURGICAL INSTRUMENTS<br>COMPRISING A LOCKABLE END<br>EFFECTOR SOCKET | 28.03.2018<br>28.03.2018      |
| (51) A61B 17/00                                                                                                                             |                                                                           | 28.03.2018                    |
| A61B 17/20                                                                                                                                  | (73) Ethicon LLC                                                          | 28.03.2018                    |
| A61M 37/00                                                                                                                                  | (72) PARIHAR, Shailendra K.<br>SHELTON, IV, Frederick E.                  | 28.03.2018<br>28.03.2018      |
| (11) EP3223899                                                                                                                              | MORGAN, Jerome R.                                                         | 28.03.2018                    |
| (21) EP15817493.8                                                                                                                           | HESS, Christopher J.                                                      | 19.04.2018                    |
| (47) 07.07.2021                                                                                                                             | BAKOS, Gregory J.                                                         | 01.05.2018                    |
| (87) GB2015053592<br>02.06.2016                                                                                                             | (31) 201762578793 P                                                       | 01.05.2018                    |
| (22) 25.11.2015                                                                                                                             | 201762578804 P                                                            | 01.05.2018                    |
| (54) MICROPENETRATOR DEVICE FOR<br>PENETRATING A BIOLOGICAL<br>BARRIER                                                                      | 201762578817 P                                                            | 01.05.2018                    |
|                                                                                                                                             | 201762578835 P                                                            | 01.05.2018                    |
| (73) Xobaderm Limited                                                                                                                       | 201762578844 P                                                            | 01.05.2018                    |
| (72) KIRBY, Andrew James                                                                                                                    | 201762578855 P                                                            | 24.08.2018                    |
| (31) 201420946                                                                                                                              | 201762611339 P                                                            | (33) United States of America |
| 201517832                                                                                                                                   | 201762611340 P                                                            | United States of America      |
| (32) 25.11.2014                                                                                                                             | 201762611341 P                                                            | United States of America      |
| 08.10.2015                                                                                                                                  | 201815908012                                                              | United States of America      |
| (33) United Kingdom                                                                                                                         | 201815908021                                                              | United States of America      |
| United Kingdom                                                                                                                              | 201815908040                                                              | United States of America      |
|                                                                                                                                             | 201815908057                                                              | United States of America      |
| (51) A61B 17/00                                                                                                                             | 201815908058                                                              | United States of America      |
| A61B 17/22                                                                                                                                  | 201815908143                                                              | United States of America      |
| A61B 17/32                                                                                                                                  | 201862649291 P                                                            | United States of America      |
| A61B 17/3207                                                                                                                                | 201862649294 P                                                            | United States of America      |
| A61M 25/10                                                                                                                                  | 201862649296 P                                                            | United States of America      |
| (11) EP3244814                                                                                                                              | 201862649300 P                                                            | United States of America      |
| (21) EP16737711.8                                                                                                                           | 201862649302 P                                                            | United States of America      |
| (47) 14.07.2021                                                                                                                             | 201862649307 P                                                            | United States of America      |
| (87) US2016012996<br>21.07.2016                                                                                                             | 201862649309 P                                                            | United States of America      |
| (22) 12.01.2016                                                                                                                             | 201862649310 P                                                            | United States of America      |
| (54) INTRAVASCULAR CATHETER<br>BALLOON DEVICE HAVING A TOOL<br>FOR ATHERECTOMY OR AN INCISING<br>PORTION FOR ATHEROMATOUS<br>PLAQUE SCORING | 201862649313 P                                                            | United States of America      |
|                                                                                                                                             | 201862649315 P                                                            | United States of America      |
| (73) VentureMed Group, Inc.                                                                                                                 | 201862649320 P                                                            | United States of America      |
| (72) Pigott, John P.                                                                                                                        | 201862649323 P                                                            | United States of America      |
| (31) 201562102755 P                                                                                                                         | 201862649327 P                                                            | United States of America      |
| (32) 13.01.2015                                                                                                                             | 201862649333 P                                                            | United States of America      |
| (33) United States of America                                                                                                               | 201862659900 P                                                            | United States of America      |
|                                                                                                                                             | 201862665128 P                                                            | United States of America      |
| (51) A61B 17/00                                                                                                                             | 201862665129 P                                                            | United States of America      |
| A61B 17/28                                                                                                                                  | 201862665134 P                                                            | United States of America      |
| A61B 17/29                                                                                                                                  | 201862665139 P                                                            | United States of America      |
| (11) EP3300670                                                                                                                              | 201862665177 P                                                            | United States of America      |
| (21) EP17190058.2                                                                                                                           | 201862665192 P                                                            | United States of America      |
| (47) 07.07.2021                                                                                                                             | 201816112095                                                              | United States of America      |
| (22) 08.09.2017                                                                                                                             | (32) 30.10.2017                                                           | United States of America      |
| (54) THERMAL MECHANISM TO PREVENT<br>REPROCESSING OR REUSE OF<br>MECHANICAL SURGICAL DEVICES                                                | 30.10.2017                                                                | United States of America      |
|                                                                                                                                             | 30.10.2017                                                                | United States of America      |
| (73) Gyrus ACMI, Inc. (D.B.A. Olympus<br>Surgical Technologies America)                                                                     | 30.10.2017                                                                | United States of America      |
| (72) Kratoska, William                                                                                                                      | 30.10.2017                                                                | United States of America      |
| (31) 201662401253 P                                                                                                                         | 28.12.2017                                                                | United States of America      |
| 201715680270                                                                                                                                | 28.12.2017                                                                | (51) A61B 17/00               |
| (32) 29.09.2016                                                                                                                             | 28.12.2017                                                                | A61B 17/29                    |
| 18.08.2017                                                                                                                                  | 28.02.2018                                                                | A61B 17/32                    |
|                                                                                                                                             | 28.02.2018                                                                | A61B 18/00                    |
|                                                                                                                                             | 28.02.2018                                                                | A61B 18/12                    |
|                                                                                                                                             | 28.02.2018                                                                | A61B 18/14                    |
|                                                                                                                                             | 28.02.2018                                                                | A61B 90/00                    |
|                                                                                                                                             | (11) EP3505096                                                            |                               |

|                                   |                                             |                                            |
|-----------------------------------|---------------------------------------------|--------------------------------------------|
| (21) EP18275203.0                 | (54) Endoscopic instrument and shaft for an | (54) MARKING BODY AND METHOD FOR           |
| (47) 14.07.2021                   | endoscopic instrument                       | PRODUCTION OF THIS MARKING                 |
| (22) 28.12.2018                   | (73) Karl Storz SE & Co. KG                 | BODY                                       |
| (54) VARIATION OF RADIO FREQUENCY | (72) Schneider, Sven                        | (73) Endosmart Gesellschaft für innovative |
| AND ULTRASONIC POWER LEVEL        | Unger, Tobias                               | Medizintechnik mbH                         |
| IN COOPERATION WITH VARYING       | (31) 102013101651                           | (72) VOGEL, Bernd                          |
| CLAMP ARM PRESSURE TO ACHIEVE     | (32) 20.02.2013                             | (51) A61B 17/00                            |
| PREDEFINED HEAT FLUX OR POWER     | (33) Germany                                | A61C 1/00                                  |
| APPLIED TO TISSUE                 | (51) A61B 17/00                             | (11) EP3636201                             |
| (73) Ethicon LLC                  | A61B 17/29                                  | (21) EP19208215.4                          |
| (72) SHELTON, IV Frederick E.     | A61B 34/00                                  | (47) 14.07.2021                            |
| YATES, David C.                   | A61B 34/30                                  | (22) 11.09.2017                            |
| (31) 201762611341 P               | (11) EP3329876                              | (54) FOOT PEDAL FOR THE WIRELESS           |
| 201762611340 P                    | (21) EP16851930.4                           | CONTROL OF A MEDICAL DEVICE                |
| 201762611339 P                    | (47) 14.07.2021                             | (73) Ferton Holding S.A.                   |
| 201862640415 P                    | (87) JP2016079179                           | (72) LEBRETON, Etienne                     |
| 201862640417 P                    | 06.04.2017                                  | MARESCHAL DE CHARENTENAY,                  |
| 201862650898 P                    | (22) 30.09.2016                             | Antoine                                    |
| 201862650882 P                    | (54) MANIPULATOR                            | (31) 102016118609                          |
| 201862650877 P                    | (73) Kyushu University, National University | (32) 30.09.2016                            |
| 201862650887 P                    | Corporation                                 | (33) Germany                               |
| 201862659900 P                    | (72) ARATA Jumpei                           | (51) A61B 17/00                            |
| 201862692768 P                    | HASHIZUME Makoto                            | B25J 19/00                                 |
| 201862692748 P                    | OGURI Susumu                                | A61B 34/30                                 |
| 201862692747 P                    | (31) 2015197194                             | A61B 90/00                                 |
| 201862729195 P                    | (32) 02.10.2015                             | (11) EP3033034                             |
| 201816182235                      | (33) Japan                                  | (21) EP14836696.6                          |
| (32) 28.12.2017                   | (51) A61B 17/00                             | (47) 07.07.2021                            |
| 28.12.2017                        | A61B 17/34                                  | (87) US2014051050                          |
| 28.12.2017                        | (11) EP3254631                              | 19.02.2015                                 |
| 08.03.2018                        | (21) EP15880975.6                           | (22) 14.08.2014                            |
| 08.03.2018                        | (47) 14.07.2021                             | (54) INSTRUMENT STERILE ADAPTER            |
| 30.03.2018                        | (87) CN2015095029                           | DRIVE INTERFACE                            |
| 30.03.2018                        | 11.08.2016                                  | (73) Intuitive Surgical Operations, Inc.   |
| 30.03.2018                        | (22) 19.11.2015                             | (72) HOLOP, Robert E.                      |
| 30.03.2018                        | (54) ANTI-REVERSE APPARATUS FOR             | COOPER, Thomas G.                          |
| 19.04.2018                        | TROCAR AND TROCAR                           | (31) 201361866124 P                        |
| 30.06.2018                        | (73) Zhou, Xing                             | (32) 15.08.2013                            |
| 30.06.2018                        | (72) Zhou, Xing                             | (33) United States of America              |
| 30.06.2018                        | (31) 201510067832                           | (51) A61B 17/00                            |
| 10.09.2018                        | (32) 07.02.2015                             | G06F 3/01                                  |
| 06.11.2018                        | (33) China                                  | (11) EP3009074                             |
| (33) United States of America     | (51) A61B 17/00                             | (21) EP15189927.5                          |
| United States of America          | A61B 34/30                                  | (47) 14.07.2021                            |
| United States of America          | (11) EP3215043                              | (22) 15.10.2015                            |
| United States of America          | (21) EP15791022.5                           | (54) METHOD OF PROVIDING                   |
| United States of America          | (47) 14.07.2021                             | INFORMATION USING PLURALITY                |
| United States of America          | (87) GB2015053280                           | OF DISPLAYS AND ULTRASOUND                 |
| United States of America          | 12.05.2016                                  | APPARATUS THEREFOR                         |
| United States of America          | (22) 30.10.2015                             | (73) Samsung Electronics Co., Ltd.         |
| United States of America          | (54) CHARACTERISING MOTION                  | (72) KANG, Ho-kyung                        |
| United States of America          | CONSTRAINTS                                 | YIM, Jin-woo                               |
| United States of America          | (73) CMR Surgical Limited                   | SOHN, Ki-won                               |
| United States of America          | (72) SCHOLAN, Andrew                        | (31) 201462064145 P                        |
| United States of America          | (31) 201419645                              | 20150074182                                |
| United States of America          | 201504786                                   | (32) 15.10.2014                            |
| United States of America          | (32) 04.11.2014                             | 27.05.2015                                 |
| (51) A61B 17/00                   | 20.03.2015                                  | (33) United States of America              |
| A61B 17/29                        | (33) United Kingdom                         | Korea (Republic)                           |
| A61B 17/3201                      | United Kingdom                              | (51) A61B 17/02                            |
| A61B 18/12                        | (51) A61B 17/00                             | A61B 17/70                                 |
| A61B 18/14                        | A61B 90/00                                  | A61F 2/44                                  |
| A61B 90/00                        | (11) EP3610822                              | A61F 2/46                                  |
| (11) EP2769682                    | (21) EP18000672.8                           | (11) EP3054900                             |
| (21) EP14155392.5                 | (47) 07.07.2021                             | (21) EP14852634.6                          |
| (47) 07.07.2021                   | (22) 14.08.2018                             | (47) 07.07.2021                            |
| (22) 17.02.2014                   |                                             | (87) US2014059072                          |
|                                   |                                             | 16.04.2015                                 |

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|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| (22) 03.10.2014                                                         | (21) EP15787691.3                                                                                                  | (22) 30.03.2016                                                       |
| (54) SPINAL IMPLANT SYSTEM AND METHOD FOR LUMBAR AND LUMBOSACRAL FUSION | (47) 14.07.2021                                                                                                    | (54) SURGICAL INSTRUMENT WITH PROGRESSIVE ROTARY DRIVE SYSTEMS        |
| (73) Warsaw Orthopedic, Inc.                                            | (87) IL2015051027                                                                                                  | (73) Ethicon LLC                                                      |
| (72) WAUGH, Lindsey G.                                                  | 21.04.2016                                                                                                         | (72) SHELTON IV, Frederick E.                                         |
| MELKENT, Anthony J.                                                     | (22) 14.10.2015                                                                                                    | HARRIS, Jason L.                                                      |
| BLACKWELL, Jonathan E.                                                  | (54) APPARATUS FOR HEART VALVE LEAFLET RESTRAINING                                                                 | MORGAN, Jerome R.                                                     |
| DROCHNER, Thomas E.                                                     | (73) Valtech Cardio, Ltd.                                                                                          | (31) 201514674965                                                     |
| GOWAN, Carrie L.                                                        | (72) GROSS, Amir                                                                                                   | (32) 31.03.2015                                                       |
| WILFONG, Bret M.                                                        | REICH, Tal                                                                                                         | (33) United States of America                                         |
| CARLS, Thomas A.                                                        | HERMAN, Yaron                                                                                                      | (51) A61B 17/072                                                      |
| HYNES, Richard A.                                                       | IFLAH, Ehud                                                                                                        | (11) EP3508141                                                        |
| SILCOX, D. Hal                                                          | BRAUON, Haim                                                                                                       | (21) EP19150760.7                                                     |
| COWAN, John A.                                                          | KUTZIK, Meir                                                                                                       | (47) 07.07.2021                                                       |
| MOBASSE, Jean-Pierre                                                    | IAMBERGER, Meni                                                                                                    | (22) 28.10.2016                                                       |
| (31) 201361887803 P                                                     | (31) 201462063468 P                                                                                                | (54) SURGICAL STAPLER COMPRISING A FLUID PENETRABLE BUTTRESS ASSEMBLY |
| 201414494389                                                            | (32) 14.10.2014                                                                                                    | (73) Ethicon LLC                                                      |
| (32) 07.10.2013                                                         | (33) United States of America                                                                                      | (72) SCHEIB, Charles J.                                               |
| 23.09.2014                                                              | (51) A61B 17/072                                                                                                   | BARTON, Trevor J.                                                     |
| (33) United States of America                                           | (11) EP3420935                                                                                                     | VENDELY, Michael J.                                                   |
| United States of America                                                | (21) EP17209320.5                                                                                                  | HARRIS, Jason L.                                                      |
| (51) A61B 17/04                                                         | (47) 07.07.2021                                                                                                    | TURNER, Prudence A.                                                   |
| A61B 17/12                                                              | (22) 21.12.2017                                                                                                    | SCHELLIN, Emily A.                                                    |
| A61F 2/01                                                               | (54) STAPLE FORMING POCKET ARRANGEMENTS                                                                            | SHELTON, IV, Frederick E.                                             |
| (11) EP2854700                                                          | (73) Ethicon LLC                                                                                                   | (31) 201514926029                                                     |
| (21) EP13797107.3                                                       | (72) BAKOS, Gregory J.                                                                                             | (32) 29.10.2015                                                       |
| (47) 07.07.2021                                                         | SHELTON, IV Frederick E.                                                                                           | (33) United States of America                                         |
| (87) IB2013001336                                                       | (31) 201715634090                                                                                                  | (51) A61B 17/072                                                      |
| 05.12.2013                                                              | (32) 27.06.2017                                                                                                    | (11) EP3442430                                                        |
| (22) 30.05.2013                                                         | (33) United States of America                                                                                      | (21) EP17719465.1                                                     |
| (54) DEVICES FOR EMBOLIC PROTECTION                                     | (51) A61B 17/072                                                                                                   | (47) 14.07.2021                                                       |
| (73) Javelin Medical Ltd.                                               | (11) EP2772202                                                                                                     | (87) US2017027269                                                     |
| (72) SHINAR, Guy                                                        | (21) EP14157371.7                                                                                                  | 19.10.2017                                                            |
| YODFAT, Ofer                                                            | (47) 14.07.2021                                                                                                    | (22) 12.04.2017                                                       |
| (31) 201261653676 P                                                     | (22) 28.02.2014                                                                                                    | (54) RELOAD SHAFT ASSEMBLY FOR SURGICAL STAPLER                       |
| 201261693979 P                                                          | (54) Integrated tissue positioning and jaw alignment features for surgical stapler                                 | (73) Applied Medical Resources Corporation                            |
| 201261746423 P                                                          | (73) Ethicon LLC                                                                                                   | (72) JASEMIAN, Babak, D.                                              |
| 201361754264 P                                                          | (72) Simms, Robert J.                                                                                              | DECKER, Steven, E.                                                    |
| (32) 31.05.2012                                                         | Hoffman, Douglas B.                                                                                                | PATEL, Atal, C.                                                       |
| 28.08.2012                                                              | Zerkle, Jason E.                                                                                                   | NELSON, Erik                                                          |
| 27.12.2012                                                              | Scheib, Charles J.                                                                                                 | MCCARTHY, Andrew, J.                                                  |
| 18.01.2013                                                              | Volz, Janna B.                                                                                                     | ZIMMERMAN, Scott                                                      |
| (33) United States of America                                           | (31) 201313780106                                                                                                  | HOPKINS, Timothy, M.                                                  |
| United States of America                                                | (32) 28.02.2013                                                                                                    | SCHOBER, Joshua, M.                                                   |
| United States of America                                                | (33) United States of America                                                                                      | WEISS, Eric, J.                                                       |
| United States of America                                                | (51) A61B 17/072                                                                                                   | BECERRA, Matthew, M.                                                  |
| (51) A61B 17/04                                                         | (11) EP3556301                                                                                                     | REED, Christina, N.                                                   |
| A61F 2/08                                                               | (21) EP19171034.2                                                                                                  | (31) 201662321618 P                                                   |
| (11) EP2704640                                                          | (47) 07.07.2021                                                                                                    | (32) 12.04.2016                                                       |
| (21) EP12748076.2                                                       | (22) 08.02.2017                                                                                                    | (33) United States of America                                         |
| (47) 07.07.2021                                                         | (54) SURGICAL INSTRUMENTS WITH AN END EFFECTOR THAT IS HIGHLY ARTICULATABLE RELATIVE TO AN ELONGATE SHAFT ASSEMBLY | (51) A61B 17/072                                                      |
| (87) US2012036850                                                       | (73) Ethicon LLC                                                                                                   | (11) EP3542733                                                        |
| 08.11.2012                                                              | (72) WORTHINGTON, Sarah A.                                                                                         | (21) EP19164720.5                                                     |
| (22) 07.05.2012                                                         | SHELTON, IV, Frederick E.                                                                                          | (47) 14.07.2021                                                       |
| (54) SOFT ANCHOR MADE FROM SUTURE FILAMENT AND SUTURE TAPE              | WEANER, Lauren S.                                                                                                  | (22) 22.03.2019                                                       |
| (73) Linvatec Corporation                                               | VENDELY, Michael J.                                                                                                | (54) STAPLE CARTRIDGE WITH SHORT CIRCUIT PREVENTION FEATURES          |
| (72) LOMBARDO, Giuseppe                                                 | (31) 201615019206                                                                                                  | (73) Ethicon LLC                                                      |
| KAM, Andrew, K.                                                         | (32) 09.02.2016                                                                                                    | (72) SCOTT, Gregory G.                                                |
| MILLER, Peter, C.                                                       | (33) United States of America                                                                                      | GERESY, Stephen D.                                                    |
| FITTS, Steven, E.                                                       | (51) A61B 17/072                                                                                                   | TCHOMUNKEU, Yvan D. Nguetio                                           |
| (31) 201161518519 P                                                     | (11) EP3610803                                                                                                     | SCHOETTNER, Laura A.                                                  |
| (32) 06.05.2011                                                         | (21) EP19196725.6                                                                                                  | KOLPITCKE, Andrew                                                     |
| (33) United States of America                                           | (47) 07.07.2021                                                                                                    | WORTHINGTON, Sarah A.                                                 |
| (51) A61B 17/068                                                        |                                                                                                                    |                                                                       |
| A61F 2/24                                                               |                                                                                                                    |                                                                       |
| (11) EP3206629                                                          |                                                                                                                    |                                                                       |



|                                    |                                    |                                                |
|------------------------------------|------------------------------------|------------------------------------------------|
| MORGAN, Joshua P.                  | (33) United States of America      | (33) United States of America                  |
| JENKINS, Scott A.                  | (51) A61B 17/12                    | (51) A61B 17/16                                |
| COURTWRIGHT, Nicholas D.           | (11) EP3424442                     | (11) EP3337411                                 |
| CUTI, Alexander R.                 | (21) EP16892289.6                  | (21) EP16778103.8                              |
| ARONHALT, Taylor W.                | (47) 14.07.2021                    | (47) 14.07.2021                                |
| BRUNS, Jeffery D.                  | (87) CN2016094588                  | (87) IB2016001143                              |
| BRADY, John E.                     | 08.09.2017                         | 23.02.2017                                     |
| KWEE, Nichole Y.                   | (22) 11.08.2016                    | (22) 18.08.2016                                |
| BAKOS, Gregory J.                  | (54) LEFT ATRIAL APPENDAGE         | (54) OFFSET REAMER DRIVER                      |
| SHELTON IV, Frederick E.           | OCCLUDER AND FABRICATING           | (73) Incipio Devices SA                        |
| (31) 201815934173                  | METHOD THEREFOR                    | (72) CHENAUX, Fabrice                          |
| (32) 23.03.2018                    | (73) Shanghai Push Medical Device  | LECHOT, André                                  |
| (33) United States of America      | Technology Co., Ltd.               | GENTIL, Thierry                                |
| (51) A61B 17/115                   | (72) GONG, Shanshi                 | (31) 201562206351 P                            |
| (11) EP3545870                     | LI, Rui                            | 201562256749 P                                 |
| (21) EP19165467.2                  | (31) 201610117939                  | (32) 18.08.2015                                |
| (47) 07.07.2021                    | 201610565731                       | 18.11.2015                                     |
| (22) 27.03.2019                    | (32) 03.03.2016                    | (33) United States of America                  |
| (54) SURGICAL ANVIL ASSEMBLIES FOR | 18.07.2016                         | United States of America                       |
| SURGICAL STAPLING INSTRUMENTS      | (33) China                         |                                                |
| (73) Covidien LP                   | China                              | (51) A61B 17/16                                |
| (72) GUERRERA, Joseph              | (51) A61B 17/122                   | (11) EP3500189                                 |
| (31) 201862649325 P                | A61B 17/128                        | (21) EP17764441.6                              |
| 201862649341 P                     | (11) EP2691030                     | (47) 14.07.2021                                |
| 201862649278 P                     | (21) EP12707777.4                  | (87) IB2017000988                              |
| 201862649176 P                     | (47) 07.07.2021                    | 22.02.2018                                     |
| 201862649304 P                     | (87) EP2012054107                  | (22) 18.08.2017                                |
| 201862649267 P                     | 04.10.2012                         | (54) OFFSET REAMER DRIVER                      |
| 201862649241 P                     | (22) 09.03.2012                    | (73) Incipio Devices SA                        |
| 201862649227 P                     | (54) SURGICAL CLIP APPLICATOR      | (72) CHENAUX, Fabrice                          |
| 201862649217 P                     | (73) Aesculap AG                   | LECHOT, André                                  |
| 201862649200 P                     | (72) SCHULZ, Peter                 | GENTIL, Thierry                                |
| 201916275570                       | MORALES, Pedro                     | (31) PCT/IB2016/001143                         |
| (32) 28.03.2018                    | WEISSHAUPT, Dieter                 | 201615355151                                   |
| 28.03.2018                         | (31) 102011001705                  | 201662431908 P                                 |
| 28.03.2018                         | (32) 31.03.2011                    | (32) 18.08.2016                                |
| 28.03.2018                         | (33) Germany                       | 18.11.2016                                     |
| 28.03.2018                         | (51) A61B 17/128                   | 09.12.2016                                     |
| 28.03.2018                         | A61B 17/29                         | (33) World Intellectual Property Office (WIPO) |
| 28.03.2018                         | (11) EP3136991                     | United States of America                       |
| 28.03.2018                         | (21) EP15721153.3                  | United States of America                       |
| 28.03.2018                         | (47) 07.07.2021                    | (51) A61B 17/16                                |
| 28.03.2018                         | (87) EP2015058942                  | A61B 17/17                                     |
| 14.02.2019                         | 05.11.2015                         | A61B 17/74                                     |
| (33) United States of America      | (22) 24.04.2015                    | A61B 17/88                                     |
| United States of America           | (54) JAW PIECE WITH A LAYERED      | (11) EP3357438                                 |
| United States of America           | CONSTRUCTION, FOR A SURGICAL       | (21) EP18154013.9                              |
| United States of America           | INSTRUMENT                         | (47) 07.07.2021                                |
| United States of America           | (73) Aesculap AG                   | (22) 30.01.2018                                |
| United States of America           | (72) SCHOLTEN, Thomas              | (54) SYSTEMS FOR INTRAMEDULLARY                |
| United States of America           | WANKE, Gunnar                      | NAIL IMPLANTATION                              |
| United States of America           | (31) 102014207971                  | (73) Globus Medical, Inc.                      |
| United States of America           | (32) 28.04.2014                    | (72) HEDGELAND, Mark                           |
| United States of America           | (33) Germany                       | MACHAMER, David                                |
| United States of America           | (51) A61B 17/15                    | JANSEN, David R.                               |
| (51) A61B 17/12                    | (11) EP3610809                     | ROSSNEY, Mark                                  |
| (11) EP3181064                     | (21) EP19201754.9                  | ROWE, David J.                                 |
| (21) EP16194393.1                  | (47) 14.07.2021                    | LAIRD, David                                   |
| (47) 14.07.2021                    | (22) 21.01.2010                    | (31) 201715423773                              |
| (22) 12.03.2014                    | (54) JIG AND SAW GUIDES FOR USE IN | (32) 03.02.2017                                |
| (54) OCCLUSIVE DEVICE DELIVERY     | OSTEOTOMIES                        | (33) United States of America                  |
| SYSTEM WITH MECHANICAL             | (73) Synthes GmbH                  | (51) A61B 17/16                                |
| DETACHMENT                         | (72) HORAN, Timothy J.             | A61B 17/84                                     |
| (73) DePuy Synthes Products, LLC   | SCHOLL, Christopher H.             | A61B 17/88                                     |
| (72) SLAZAS, Robert R.             | TOUHALISKY, Daneen K.              | (11) EP3003186                                 |
| LORENZO, Juan A.                   | (31) 146898 P                      | (21) EP14808233.2                              |
| (31) 201313802101                  | (32) 23.01.2009                    | (47) 14.07.2021                                |
| (32) 13.03.2013                    |                                    | (87) US2014041252                              |
|                                    |                                    | 11.12.2014                                     |

|                                            |                                    |                                          |
|--------------------------------------------|------------------------------------|------------------------------------------|
| (22) 06.06.2014                            | (51) A61B 17/24                    | A61M 1/00                                |
| (54) ANGLED INSTRUMENT ASSEMBLY            | A61M 1/00                          | A61M 39/28                               |
| (73) Lanx, Inc.                            | A61M 3/02                          | (11) EP3449957                           |
| (72) STOLL, Caleb                          | (11) EP2424590                     | (21) EP18190013.5                        |
| CAPOTE, Allison                            | (21) EP10770055.1                  | (47) 14.07.2021                          |
| CORNELIU, Vlad                             | (47) 07.07.2021                    | (22) 21.08.2018                          |
| (31) 201313913158                          | (87) US2010001243                  | (54) MEDICAL DEVICE                      |
| (32) 07.06.2013                            | 04.11.2010                         | (73) Gyrus ACMI, Inc. (D.B.A. Olympus    |
| (33) United States of America              | (22) 27.04.2010                    | Surgical Technologies America)           |
| (51) A61B 17/16                            | (54) IRRIGATION AND ASPIRATION     | (72) Cheng, Ming J.                      |
| A61B 17/86                                 | DEVICES                            | Scruggs, Phillip R.                      |
| (11) EP3448272                             | (73) Aardvark Medical, Inc.        | (31) 201715691810                        |
| (21) EP17722553.9                          | (72) BAKER, Peter, Christensen     | (32) 31.08.2017                          |
| (47) 14.07.2021                            | SLONE, Clinton, N.                 | (33) United States of America            |
| (87) US2017029029                          | STRASSER, Michael, J.              | (51) A61B 17/3203                        |
| 02.11.2017                                 | LOVETTE, James, M.                 | A61B 18/00                               |
| (22) 23.04.2017                            | KING, Thomas                       | A61B 18/04                               |
| (54) JOINT FUSION INSTRUMENTS              | TREADWELL, Richard                 | A61M 5/30                                |
| (73) IMDS LLC                              | (31) 387015                        | C12M 1/42                                |
| Mayo Foundation for Medical Education      | 387054                             | C12N 15/87                               |
| and Research                               | 387018                             | (11) EP2821020                           |
| (72) RINDAL, Bjorn N.                      | 387047                             | (21) EP13754261.9                        |
| SCHUMACHER, Brian Scott                    | (32) 27.04.2009                    | (47) 14.07.2021                          |
| SLATER, Nicholas                           | 27.04.2009                         | (87) JP2013055703                        |
| MAHPEYKAR, Navid                           | 27.04.2009                         | 06.09.2013                               |
| BERVEN, Sigurd                             | 27.04.2009                         | (22) 01.03.2013                          |
| CROSS III, William W.                      | (33) United States of America      | (54) BUBBLE-SPRAYING MEMBER,             |
| (31) 201615137804                          | United States of America           | METHOD FOR PRODUCING SAME,               |
| 201615137848                               | United States of America           | AND A NON THERAPEUTIC AND NON            |
| 201715420849                               | United States of America           | SURGICAL ABLATION METHOD USING           |
| (32) 25.04.2016                            | (51) A61B 17/32                    | THE BUBBLE SPRAYING MEMBER               |
| 25.04.2016                                 | (11) EP2849658                     | (73) Japan Science and Technology Agency |
| 31.01.2017                                 | (21) EP13724971.0                  | (72) YAMANISHI, Yoko                     |
| (33) United States of America              | (47) 07.07.2021                    | SAKUMA, Shinya                           |
| United States of America                   | (87) US2013039796                  | KURIKI, Hiroki                           |
| United States of America                   | 21.11.2013                         | ARAI, Fumihito                           |
| (51) A61B 17/22                            | (22) 07.05.2013                    | (31) 2012047053                          |
| A61L 29/02                                 | (54) DISPOSABLE BLADE ASSEMBLY AND | 2013003748                               |
| A61L 29/04                                 | REUSABLE BLADE HUB ASSEMBLY        | (32) 02.03.2012                          |
| A61L 29/06                                 | (73) Smith & Nephew, Inc           | 11.01.2013                               |
| A61M 25/00                                 | (72) LORETH, Brian Joseph          | (33) Japan                               |
| A61M 25/01                                 | IRMAKOGLU-SHENER, Cemal            | Japan                                    |
| A61B 90/00                                 | JEZIERSKI, Rafael Z.               | (51) A61B 17/3207                        |
| (11) EP2988684                             | (31) 201213472895                  | A61B 17/34                               |
| (21) EP14789021.4                          | (32) 16.05.2012                    | A61B 18/16                               |
| (47) 14.07.2021                            | (33) United States of America      | A61F 2/24                                |
| (87) US2014035142                          | (51) A61B 17/32                    | A61N 1/05                                |
| 30.10.2014                                 | A61B 18/14                         | A61N 1/36                                |
| (22) 23.04.2014                            | (11) EP3629951                     | (11) EP3522800                           |
| (54) THROMBUS EXTRACTION CATHETER          | (21) EP18730576.8                  | (21) EP17780721.1                        |
| (73) NorMedix, Inc.                        | (47) 07.07.2021                    | (47) 14.07.2021                          |
| (72) WELCH, Jeffrey M.                     | (87) US2018033599                  | (87) EP2017075362                        |
| GANSKE, Karl V.                            | 29.11.2018                         | 12.04.2018                               |
| SUTTON, Gregg Stuart                       | (22) 21.05.2018                    | (22) 05.10.2017                          |
| (31) 201361815160 P                        | (54) COMBINATION ULTRASONIC AND    | (54) ASSEMBLY FOR REPLACING A            |
| (32) 23.04.2013                            | ELECTROSURGICAL INSTRUMENT         | HEART VALVE OR A CORONARY                |
| (33) United States of America              | HAVING ELECTRICAL CIRCUITS WITH    | ANGIOPLASTY ASSEMBLY                     |
| (51) A61B 17/221                           | SHARED RETURN PATH                 | (73) Electroducer                        |
| A61B 18/26                                 | (73) Ethicon LLC                   | (72) FAURIE, Benjamin                    |
| (11) EP3744265                             | (72) LEUCK, Stephen M.             | (31) 1659669                             |
| (21) EP19000261.8                          | WIENER, Eitan T.                   | 1659671                                  |
| (47) 07.07.2021                            | (31) 201762509351 P                | 1659673                                  |
| (22) 28.05.2019                            | 201815967740                       | (32) 07.10.2016                          |
| (54) MEDICAL INSTRUMENT AND METHOD         | (32) 22.05.2017                    | 07.10.2016                               |
| FOR ITS PRODUCTION                         | 01.05.2018                         | 07.10.2016                               |
| (73) Endosmart Gesellschaft für innovative | (33) United States of America      | (33) France                              |
| Medizintechnik mbH                         | United States of America           | France                                   |
| (72) VOGEL, Bernd, Dr.                     | (51) A61B 17/32                    | France                                   |

|                                                                                                                                  |                                                                                  |                                          |
|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|------------------------------------------|
| (51) A61B 17/34                                                                                                                  | A61L 29/14                                                                       | 22.09.2016                               |
| A61B 17/60                                                                                                                       | A61M 16/00                                                                       | (22) 03.03.2016                          |
| (11) EP3437691                                                                                                                   | A61M 16/08                                                                       | (54) SPINAL IMPLANT SYSTEM               |
| (21) EP17774878.7                                                                                                                | A61M 25/02                                                                       | (73) Warsaw Orthopedic, Inc.             |
| (47) 07.07.2021                                                                                                                  | A61M 39/08                                                                       | (72) TRIEU, Hai H.                       |
| (87) JP2017012279                                                                                                                | C08F 8/04                                                                        | (31) 201514663193                        |
| 05.10.2017                                                                                                                       | C08F 297/04                                                                      | (32) 19.03.2015                          |
| (22) 27.03.2017                                                                                                                  | A61F 2/04                                                                        | (33) United States of America            |
| (54) TOOL FOR SUSTAINED RELEASE OF ANTIBIOTIC                                                                                    | (11) EP3620477                                                                   | (51) A61B 17/70                          |
| (73) Maruo, Akihiro                                                                                                              | (21) EP19193831.5                                                                | A61B 17/86                               |
| (72) Maruo, Akihiro                                                                                                              | (47) 14.07.2021                                                                  | (11) EP3569169                           |
| (31) 2016063474                                                                                                                  | (22) 27.08.2019                                                                  | (21) EP19174126.3                        |
| (32) 28.03.2016                                                                                                                  | (54) MEDICAL TUBING AND COMPOSITIONS AND METHODS FOR MAKING THEREFOR             | (47) 07.07.2021                          |
| (33) Japan                                                                                                                       | (73) Kraton Polymers Research B.V.                                               | (22) 13.05.2019                          |
| (51) A61B 17/34                                                                                                                  | (72) DUBOIS, Donn BHATTACHARYA, Aparajita                                        | (54) ORTHOPEDIC FIXATION DEVICES         |
| A61B 34/30                                                                                                                       | (31) 201862729058 P                                                              | (73) Globus Medical, Inc                 |
| A61B 90/50                                                                                                                       | (32) 10.09.2018                                                                  | (72) YACOB, George                       |
| A61B 90/90                                                                                                                       | (33) United States of America                                                    | NICHOLS, Jeff                            |
| (11) EP3179951                                                                                                                   | (51) A61B 17/62                                                                  | (31) 201815982587                        |
| (21) EP15831381.7                                                                                                                | A61B 17/88                                                                       | (32) 17.05.2018                          |
| (47) 14.07.2021                                                                                                                  | (11) EP3476342                                                                   | (33) United States of America            |
| (87) US2015044757                                                                                                                | (21) EP18201912.5                                                                | (51) A61B 17/72                          |
| 18.02.2016                                                                                                                       | (47) 07.07.2021                                                                  | A61B 17/74                               |
| (22) 12.08.2015                                                                                                                  | (22) 23.10.2018                                                                  | A61F 2/36                                |
| (54) A SURGICAL SYSTEM WITH VARIABLE ENTRY GUIDE CONFIGURATIONS                                                                  | (54) WIRE TENSIONER TIP                                                          | A61F 2/78                                |
| (73) Intuitive Surgical Operations Inc.                                                                                          | (73) Wright Medical Technology, Inc.                                             | (11) EP3476320                           |
| (72) MCGROGAN, Anthony K. COOPER, Thomas G. LARKIN, David Q. ANDERSON, Kent M. BROWN, Jeffrey D. LILAGAN, Paul E. IKEDA, Michael | (72) WONG, Kian-Ming LOBIANCO, Freddie                                           | (21) EP17850343.9                        |
| (31) 201462038096 P                                                                                                              | (31) 201762576872 P                                                              | (47) 14.07.2021                          |
| 201462038106 P                                                                                                                   | 201816152650                                                                     | (87) ES2017070619                        |
| (32) 15.08.2014                                                                                                                  | (32) 25.10.2017                                                                  | 22.03.2018                               |
| 15.08.2014                                                                                                                       | 05.10.2018                                                                       | (22) 18.09.2017                          |
| (33) United States of America                                                                                                    | (33) United States of America                                                    | (54) INTRAMEDULLARY FIXATION DEVICE      |
| United States of America                                                                                                         | (51) A61B 17/66                                                                  | (73) Universitat Politècnica de València |
| (51) A61B 17/34                                                                                                                  | A61B 17/72                                                                       | Universidad de Valencia                  |
| A61B 90/00                                                                                                                       | A61B 17/80                                                                       | Fundación para la Investigación del      |
| A61B 90/10                                                                                                                       | A61B 90/00                                                                       | Hospital Clínico de la Comunidad         |
| A61B 90/11                                                                                                                       | (11) EP3463127                                                                   | Valenciana (INCLIVA)                     |
| (11) EP3096707                                                                                                                   | (21) EP17728584.8                                                                | (72) EXPÓSITO OLLERO, José               |
| (21) EP15703849.8                                                                                                                | (47) 07.07.2021                                                                  | ALBELDA VITORIA, José                    |
| (47) 07.07.2021                                                                                                                  | (87) FI2017050344                                                                | HOYOS FUENTES, Juan Víctor               |
| (87) US2015012675                                                                                                                | 30.11.2017                                                                       | VALLÉS LLUCH, Ana                        |
| 30.07.2015                                                                                                                       | (22) 04.05.2017                                                                  | SILVESTRE MUÑOZ, Antonio                 |
| (22) 23.01.2015                                                                                                                  | (54) AN EXTRA-CORPORAL FORCE PRODUCING DEVICE AND A BONE LENGTHENING ARRANGEMENT | (31) 201631220                           |
| (54) STEREOTACTIC ACCESS DEVICES                                                                                                 | (73) Synoste Oy                                                                  | (32) 19.09.2016                          |
| (73) Visualase, Inc.                                                                                                             | (72) HAAJA, Juha HALLILA, Harri RITVANEN, Antti LIVINGSTON, Ryan KARI, Taneli    | (33) Spain                               |
| (72) GOWDA, Ashok HOUSIERE, Charles AHUJA, Manish PATWARDHAN, Ravish MCNICHOLS, Roger J.                                         | (31) 20165445                                                                    | (51) A61B 17/72                          |
| (31) 201461930781 P                                                                                                              | (32) 27.05.2016                                                                  | A61B 17/86                               |
| 201514602591                                                                                                                     | (33) Finland                                                                     | (11) EP3269319                           |
| (32) 23.01.2014                                                                                                                  | (51) A61B 17/70                                                                  | (21) EP17185419.3                        |
| 22.01.2015                                                                                                                       | A61B 17/82                                                                       | (47) 07.07.2021                          |
| (33) United States of America                                                                                                    | A61F 2/30                                                                        | (22) 01.10.2013                          |
| United States of America                                                                                                         | A61F 2/44                                                                        | (54) REVERSIBLE BONE COUPLING DEVICE     |
| (51) A61B 17/56                                                                                                                  | A61F 2/46                                                                        | (73) Zimmer, Inc.                        |
| A61B 17/88                                                                                                                       | (11) EP3270804                                                                   | (72) WEINER, Lon S.                      |
| A61J 1/00                                                                                                                        | (21) EP16765414.4                                                                | KATCHIS, Stuart D.                       |
| A61L 29/04                                                                                                                       | (47) 14.07.2021                                                                  | ALFARO, Arthur A.                        |
|                                                                                                                                  | (87) US2016020549                                                                | VAN IPEREN, Willem H.P.                  |
|                                                                                                                                  |                                                                                  | PEPPER, John R.                          |
|                                                                                                                                  |                                                                                  | TRUMAN, Mari S.                          |
|                                                                                                                                  |                                                                                  | (31) 201213632337                        |
|                                                                                                                                  |                                                                                  | (32) 01.10.2012                          |
|                                                                                                                                  |                                                                                  | (33) United States of America            |
|                                                                                                                                  |                                                                                  | (51) A61B 17/80                          |
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|                                                                                                                                  |                                                                                  | A61F 2/30                                |
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| (47) 14.07.2021                                            | MANNANAL, Subash K.                                                                    | F16C 19/06                                                                                              |
| (87) IB2016057076                                          | PAK, Chulho                                                                            | F16C 33/72                                                                                              |
| 01.06.2017                                                 | (31) 201962802265 P                                                                    | F16C 33/78                                                                                              |
| (22) 23.11.2016                                            | (32) 07.02.2019                                                                        | F16J 15/16                                                                                              |
| (54) BONE IMPLANTS AND METHODS FOR CORRECTING BONE DEFECTS | (33) United States of America                                                          | F16J 15/3204                                                                                            |
| (73) OssDsign AB                                           | (51) A61B 34/20                                                                        | (11) EP3667110                                                                                          |
| (72) ENGSTRAND, Thomas                                     | (11) EP3395281                                                                         | (21) EP19219903.2                                                                                       |
| ENGQVIST, Håkan                                            | (21) EP18166256.0                                                                      | (47) 07.07.2021                                                                                         |
| IBRAHIM, Ghanim                                            | (47) 07.07.2021                                                                        | (22) 07.03.2017                                                                                         |
| ÅBERG, Jonas                                               | (22) 09.12.2014                                                                        | (54) ROLLING BEARING FOR A ROLLER BEARING UNIT FOR AIR TURBINE AND AIR TURBINE HANDPIECE FOR DENTAL USE |
| (31) 201562259500 P                                        | (54) SURGICAL NAVIGATION METHOD                                                        | (73) NSK Ltd.                                                                                           |
| (32) 24.11.2015                                            | (73) Mahfouz, Mohamed R.                                                               | (72) Nakahara, Toru                                                                                     |
| (33) United States of America                              | (72) Mahfouz, Mohamed R.                                                               | Yamamoto, Atsuhiko                                                                                      |
| (51) A61B 18/00                                            | (31) 201361913608 P                                                                    | Miyazaki, Shoshi                                                                                        |
| A61B 18/12                                                 | 201461951221 P                                                                         | (31) 2016043309                                                                                         |
| A61B 18/18                                                 | 201461977984 P                                                                         | 2016129149                                                                                              |
| (11) EP3482709                                             | 201462022899 P                                                                         | (32) 07.03.2016                                                                                         |
| (21) EP18194554.4                                          | (32) 09.12.2013                                                                        | 29.06.2016                                                                                              |
| (47) 07.07.2021                                            | 11.03.2014                                                                             | (33) Japan                                                                                              |
| (22) 06.04.2011                                            | 10.04.2014                                                                             | Japan                                                                                                   |
| (54) SYSTEM FOR PULMONARY TREATMENT                        | 10.07.2014                                                                             | (51) A61C 3/04                                                                                          |
| (73) Nuvaire, Inc.                                         | (33) United States of America                                                          | A61C 19/02                                                                                              |
| (72) Deem, Mark                                            | United States of America                                                               | A61B 50/24                                                                                              |
| Shenoy, Vivek                                              | United States of America                                                               | A61B 50/30                                                                                              |
| Mayse, Martin L.                                           | United States of America                                                               | A61B 50/33                                                                                              |
| (31) 32134610 P                                            | (51) A61B 34/20                                                                        | (11) EP3042626                                                                                          |
| (32) 06.04.2010                                            | A61B 90/00                                                                             | (21) EP16150381.8                                                                                       |
| (33) United States of America                              | (11) EP3302220                                                                         | (47) 07.07.2021                                                                                         |
| (51) A61B 18/00                                            | (21) EP16803978.2                                                                      | (22) 07.01.2016                                                                                         |
| A61B 18/20                                                 | (47) 14.07.2021                                                                        | (54) MEDICAL DEVICE TRAY AND METHOD OF FORMING THE MEDICAL DEVICE TRAY                                  |
| A61B 18/22                                                 | (87) US2016033063                                                                      | (73) Symmetry Medical Manufacturing, Inc.                                                               |
| A61N 5/06                                                  | 08.12.2016                                                                             | (72) Kerboul, Guillaume                                                                                 |
| A61N 5/067                                                 | (22) 18.05.2016                                                                        | Truscott, James                                                                                         |
| (11) EP3407961                                             | (54) MEDICAL INSTRUMENT WITH SENSOR FOR USE IN A SYSTEM FOR ELECTROMAGNETIC NAVIGATION | Dassonville, Benjamin                                                                                   |
| (21) EP17743839.7                                          | (73) Covidien LP                                                                       | Warocquier, Antoine                                                                                     |
| (47) 14.07.2021                                            | (72) CROWLEY, Thomas P.                                                                | (31) 201514592311                                                                                       |
| (87) IL2017050005                                          | MIEL, David J.                                                                         | (32) 08.01.2015                                                                                         |
| 03.08.2017                                                 | SERDAR, David J.                                                                       | (33) United States of America                                                                           |
| (22) 01.01.2017                                            | STOPEK, Joshua B.                                                                      | (51) A61C 5/42                                                                                          |
| (54) SKIN TREATMENT APPARATUS                              | COSTELLO, David M.                                                                     | (11) EP3574865                                                                                          |
| (73) Syneron Medical Ltd.                                  | KOYRAKH, Lev A.                                                                        | (21) EP18175037.3                                                                                       |
| (72) EISENMANN, Shmulik                                    | JASPERSON, Keith E.                                                                    | (47) 07.07.2021                                                                                         |
| KADOSH, Itai                                               | SCHILL, Jon D.                                                                         | (22) 30.05.2018                                                                                         |
| KIDRON, Einat                                              | (31) 201562170383 P                                                                    | (54) ENDODONTIC INSTRUMENT                                                                              |
| GOLAND, Vladimir                                           | 201615147273                                                                           | (73) Coltène GmbH + Co. KG                                                                              |
| GABAY-MADER, Carmit                                        | (32) 03.06.2015                                                                        | (72) PIASECKI, Lucila                                                                                   |
| (31) 201662286458 P                                        | 05.05.2016                                                                             | (51) A61C 7/00                                                                                          |
| (32) 25.01.2016                                            | (33) United States of America                                                          | (11) EP3021781                                                                                          |
| (33) United States of America                              | United States of America                                                               | (21) EP14744741.1                                                                                       |
| (51) A61B 34/10                                            | (51) A61C 1/00                                                                         | (47) 07.07.2021                                                                                         |
| A61B 34/20                                                 | A61C 5/42                                                                              | (87) US2014046461                                                                                       |
| (11) EP3692939                                             | (11) EP3297567                                                                         | 22.01.2015                                                                                              |
| (21) EP20156040.6                                          | (21) EP16736925.5                                                                      | (22) 14.07.2014                                                                                         |
| (47) 14.07.2021                                            | (47) 07.07.2021                                                                        | (54) METHOD FOR USER INTERACTION IN 3-D CEPHALOMETRIC ANALYSIS                                          |
| (22) 07.02.2020                                            | (87) IT2016000133                                                                      | (73) Carestream Dental Technology Topco Limited                                                         |
| (54) SURGICAL SYSTEMS FOR FACILITATING TISSUE TREATMENT    | 14.09.2017                                                                             | (72) INGLESE, Jean-Marc                                                                                 |
| (73) Stryker European Operations Limited                   | (22) 23.05.2016                                                                        | CHEN, Shoupu                                                                                            |
| (72) SPAELTER, Ulrich                                      | (54) REAMER WITH IMPROVED BLADE FOR NI-TI INSTRUMENTS FOR ENDODONTIC USE               | RAY, Lawrence A.                                                                                        |
| PAULISCH, Matthias                                         | (73) Malagnino, Giulia                                                                 | (31) 201313945941                                                                                       |
| HUEGLE, Fabian                                             | (72) Malagnino, Giulia                                                                 | (32) 19.07.2013                                                                                         |
| RIEMER, Rose                                               | (31) UB20150710                                                                        | (33) United States of America                                                                           |
| CHRISTEN, Alexis                                           | (32) 21.05.2015                                                                        |                                                                                                         |
| WIEDERKEHR, Andreas                                        | (33) Italy                                                                             |                                                                                                         |
| STUCKI, Katja                                              | (51) A61C 1/10                                                                         |                                                                                                         |
| SYLVESTRE, Pierre-Luc                                      |                                                                                        |                                                                                                         |

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| (51) A61C 7/00                    | (21) EP17719606.0                   | Frenzel, Frank                          |
| A61C 7/08                         | (47) 14.07.2021                     | Baaske, Thomas                          |
| (11) EP3217917                    | (87) EP2017060024                   | Frei, Roger                             |
| (21) EP15826154.5                 | 02.11.2017                          |                                         |
| (47) 07.07.2021                   | (22) 27.04.2017                     | (51) A61C 15/00                         |
| (87) IB2015002134                 | (54) FLEXIBLE DENTAL BASIC          | (11) EP3630000                          |
| 19.05.2016                        | STRUCTURE FOR SECURING              | (21) EP18729045.7                       |
| (22) 11.11.2015                   | DENTAL PROSTHETIC FIXTURES TO       | (47) 07.07.2021                         |
| (54) METHOD FOR CREATING A DENTAL | IMPLANTS                            | (87) EP2018062516                       |
| APPLIANCE WITH CAVITY FOR AN      | (73) Kulzer GmbH                    | 06.12.2018                              |
| UNERUPTED OR ERUPTING TOOTH       | (72) FUNK, Matthias                 | (22) 15.05.2018                         |
| (73) Align Technology, Inc.       | (31) 102016107930                   | (54) INTERDENTAL CLEANING DEVICE        |
| (72) CHOI, Jeeyoung               | (32) 28.04.2016                     | AND METHOD FOR PRODUCING AN             |
| LI, Chunhua                       | (33) Germany                        | INTERDENTAL CLEANING DEVICE             |
| MORTON, John                      | (51) A61C 9/00                      | (73) Luoro GmbH                         |
| PESENTI, Bastien                  | B05C 17/01                          | (72) BAHLMANN, Louis                    |
| MATOV, Vadim                      | (11) EP3718501                      | (31) 102017209389                       |
| BELIAEV, Alexander                | (21) EP20165930.7                   | (32) 02.06.2017                         |
| USHANOV, Petr                     | (47) 14.07.2021                     | (33) Germany                            |
| ROSCHIN, Roman, A.                | (22) 26.03.2020                     | (51) A61C 15/02                         |
| (31) 201414541021                 | (54) DISPENSER FOR DENTAL MATERIALS | C08J 5/04                               |
| (32) 13.11.2014                   | (73) Kulzer GmbH                    | C08J 5/10                               |
| (33) United States of America     | (72) GRUNDLER, Andreas              | C08K 3/40                               |
| (51) A61C 7/02                    | SCHMID, Stephan                     | C08K 7/14                               |
| A61C 7/08                         | ABEL, Yvonne                        | C08K 7/20                               |
| A61C 13/00                        | (31) 102019108533                   | C08L 23/12                              |
| B23Q 7/04                         | (32) 02.04.2019                     | C08L 35/00                              |
| (11) EP3558155                    | (33) Germany                        | (11) EP3520731                          |
| (21) EP17830013.3                 | (51) A61C 13/00                     | (21) EP17856085.0                       |
| (47) 07.07.2021                   | (11) EP3395289                      | (47) 14.07.2021                         |
| (87) IB2017058098                 | (21) EP18169820.0                   | (87) JP2017034656                       |
| 28.06.2018                        | (47) 14.07.2021                     | 05.04.2018                              |
| (22) 19.12.2017                   | (22) 27.04.2018                     | (22) 26.09.2017                         |
| (54) EQUIPMENT FOR MANUFACTURING  | (54) BLANK FOR MANUFACTURING        | (54) INTERDENTAL CLEANING TOOL          |
| ORTHODONTIC AND/OR PROSTHETIC     | DENTAL DEVICES                      | (73) Kobayashi Pharmaceutical Co., Ltd. |
| DENTAL DEVICES                    | (73) Cabinet Dentaire Vinci         | (72) KIKKAWA, Tasuku                    |
| (73) Airnivol S.r.l.              | (72) VINCI, Salvatore               | SHIRAKI, Narutomo                       |
| (72) BARONE, Sandro               | (31) 1753742                        | KUSAKABE, Noboru                        |
| D'ANTÒ, Vincenzo                  | (32) 28.04.2017                     | (31) 2016193179                         |
| RAZIONALE, Armando Viviano        | (33) France                         | 2017180847                              |
| (31) 201600128948                 | (51) A61C 13/00                     | (32) 30.09.2016                         |
| (32) 20.12.2016                   | A61C 5/70                           | 21.09.2017                              |
| (33) Italy                        | (11) EP3666220                      | (33) Japan                              |
| (51) A61C 7/08                    | (21) EP18211405.8                   | Japan                                   |
| A61C 7/10                         | (47) 07.07.2021                     | (51) A61C 17/02                         |
| A61F 5/56                         | (22) 10.12.2018                     | (11) EP3531960                          |
| (11) EP3445272                    | (54) METHOD FOR THE DESIGN AND      | (21) EP17787598.6                       |
| (21) EP17720959.0                 | MANUFACTURE OF A DENTAL             | (47) 07.07.2021                         |
| (47) 14.07.2021                   | COMPONENT                           | (87) GB2017053140                       |
| (87) US2017028593                 | (73) Sirona Dental Systems GmbH     | 03.05.2018                              |
| 26.10.2017                        | DENTSPLY SIRONA Inc.                | (22) 17.10.2017                         |
| (22) 20.04.2017                   | (72) Schneider, Hans-Christian      | (54) DENTAL CLEANING APPLIANCE          |
| (54) APPARATUS AND METHOD FOR     | Nowarra, Oliver                     | (73) Dyson Technology Limited           |
| REDUCING BRUXISM AND OCCLUSAL     | Weiß, Daniel                        | (72) TWEEDIE, Robert                    |
| FORCES                            | Fornoff, Peter                      | VINCENT, Christopher                    |
| (73) Advanced Facialdntics LLC    | (51) A61C 13/01                     | FOLLOWS, Thomas                         |
| (72) SIMONETTI, Scott A.          | A61C 13/08                          | COLEMAN, James                          |
| (31) 201662325176 P               | A61C 13/087                         | WALTON, Andrew                          |
| 201662325185 P                    | A61C 13/09                          | (31) 201618246                          |
| 201662325192 P                    | A61C 13/10                          | (32) 28.10.2016                         |
| (32) 20.04.2016                   | A61C 13/20                          | (33) United Kingdom                     |
| 20.04.2016                        | (11) EP3597143                      | (51) A61C 17/22                         |
| 20.04.2016                        | (21) EP18183660.2                   | (11) EP3470015                          |
| (33) United States of America     | (47) 07.07.2021                     | (21) EP17195869.7                       |
| United States of America          | (22) 16.07.2018                     | (47) 07.07.2021                         |
| United States of America          | (54) DENTAL PROSTHESIS              | (22) 11.10.2017                         |
| (51) A61C 8/00                    | (73) Ivoclar Vivadent AG            | (54) ELECTRICAL TOOTHBRUSH HANDLE       |
| (11) EP3448299                    | (72) Geler, Markus                  | AND ELECTRIC TOOTHBRUSH                 |

|                                                              |                                 |                                   |
|--------------------------------------------------------------|---------------------------------|-----------------------------------|
| WITH THE ELECTRIC TOOTHBRUSH<br>HANDLE AND WITH A BRUSH HEAD | A61N 1/05                       | A61F 13/84                        |
| (73) Trisa Holding AG                                        | A61N 1/36                       | (11) EP3496679                    |
| (72) FISCHER, Herbert                                        | (11) EP3291880                  | (21) EP18849349.8                 |
| KIRCHHOFER, Pierre Fredy                                     | (21) EP16790069.5               | (47) 14.07.2021                   |
| ZWIMPFER, Martin                                             | (47) 07.07.2021                 | (87) IB2018001076                 |
| (51) A61C 17/22                                              | (87) US2016030922               | 28.02.2019                        |
| (11) EP3613378                                               | 10.11.2016                      | (22) 22.08.2018                   |
| (21) EP18205433.8                                            | (22) 05.05.2016                 | (54) INSERTER FOR URETHRAL PLUG   |
| (47) 14.07.2021                                              | (54) DEVICE FOR ELECTRICAL      | (73) Life360 Innovations Inc.     |
| (22) 09.11.2018                                              | STIMULATION OF PERIDONTAL       | (72) JANZEN, Ernie                |
| (54) TOOTH CLEANING DEVICE WITH                              | COMPLEX AND SURROUNDING         | HALSTED, Nigel                    |
| INTEGRATED DRIVE DEVICE                                      | TISSUE                          | BELLAIRE, Thom                    |
| (73) BLBR GmbH                                               | (73) Haralambidis, Cosmo        | RANGER, Nicole                    |
| (72) KEINER, Michael                                         | (72) Haralambidis, Cosmo        | ORR, Robert, Mitchell             |
| (31) 18185450                                                | (31) 201562157053 P             | (31) 201715683167                 |
| (32) 25.07.2018                                              | (32) 05.05.2015                 | (32) 22.08.2017                   |
| (33) European Patent Office (EPO)                            | (33) United States of America   | (33) United States of America     |
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| A61C 17/34                                                   | A61F 2/30                       | (11) EP3443936                    |
| H02K 33/02                                                   | A61F 2/34                       | (21) EP18191483.9                 |
| H02K 33/16                                                   | A61F 2/38                       | (47) 14.07.2021                   |
| (11) EP3078348                                               | A61F 2/40                       | (22) 09.03.2015                   |
| (21) EP15165695.6                                            | A61F 2/42                       | (54) DIRECTIONAL TISSUE EXPANDER  |
| (47) 07.07.2021                                              | A61F 2/46                       | (73) Mentor Worldwide LLC         |
| (22) 29.04.2015                                              | (11) EP3597152                  | (72) DAVILA, Luis Alberto         |
| (54) SPRING MECHANISM FOR POWER                              | (21) EP19194046.9               | FALCON, Anita M.                  |
| DEVICE                                                       | (47) 07.07.2021                 | HRISTOV, Krasimira                |
| (73) Ranir, LLC                                              | (22) 08.04.2009                 | KRIKSUNOV, Leo B.                 |
| (72) Dishon, Bryan J.                                        | (54) MENISCUS PROSTHETIC DEVICE | TANNHAUSER, Robert J.             |
| (31) 201514661680                                            | (73) Active Implants LLC        | (31) 201414230251                 |
| (32) 18.03.2015                                              | (72) LINDER-GANZ, Eran          | (32) 31.03.2014                   |
| (33) United States of America                                | SHTERLING, Avraham              | (33) United States of America     |
| (51) A61C 17/22                                              | WEISSBERG, Noam                 | (51) A61F 2/24                    |
| B26B 19/38                                                   | ELSNER, Jacob Jonathan          | (11) EP2381895                    |
| H02J 7/00                                                    | ZUR, Gal                        | (21) EP09836996.0                 |
| (11) EP3689293                                               | DANINO, Amir                    | (47) 07.07.2021                   |
| (21) EP20152211.7                                            | (31) 10011508                   | (87) US2009069040                 |
| (47) 07.07.2021                                              | 10009008                        | 08.07.2010                        |
| (22) 16.01.2020                                              | 10006908                        | (22) 21.12.2009                   |
| (54) CARE UNIT                                               | 10005908                        | (54) SEMI-RIGID ANNULOPLASTY RING |
| (73) Panasonic Intellectual Property                         | (32) 09.04.2008                 | AND BAND AND METHOD OF MAKING     |
| Management Co., Ltd.                                         | 09.04.2008                      | AN ANNULOPLASTY RING              |
| (72) HOSHINO, Junichi                                        | 09.04.2008                      | (73) Medtronic, Inc.              |
| (31) 2019014582                                              | 09.04.2008                      | (72) WRIGHT, John T. M.           |
| (32) 30.01.2019                                              | (33) United States of America   | (31) 142073 P                     |
| (33) Japan                                                   | United States of America        | (32) 31.12.2008                   |
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| A61M 19/00                                                   | A61F 5/00                       | (21) EP11809374.9                 |
| (11) EP3179967                                               | A61F 6/20                       | (47) 07.07.2021                   |
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| (47) 14.07.2021                                              | (11) EP2967954                  | 26.01.2012                        |
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| 18.02.2016                                                   | (47) 07.07.2021                 | (54) PERCUTANEOUS MITRAL VALVE    |
| (22) 11.08.2015                                              | (87) EP2014055112               | REPLACEMENT AND SEALING           |
| (54) MOUTH COOLER                                            | 18.09.2014                      | (73) Cardiovalve Ltd              |
| (73) Braincool AB                                            | (22) 14.03.2014                 | (72) GROSS, Yossi                 |
| (72) BERG, Jon                                               | (54) RESTRICTION DEVICE         | HACOHEN, Gil                      |
| WALEIJ, Martin                                               | (73) Implantica Patent Ltd.     | MILLER, Eran                      |
| JONTELL, Mats                                                | (72) FORSELL, Peter             | ZIPORY, Yuval                     |
| (31) 1450930                                                 | (31) 1350319                    | REICH, Tal                        |
| (32) 11.08.2014                                              | (32) 15.03.2013                 | (31) 201161492449 P               |
| (33) Sweden                                                  | (33) Sweden                     | 201113033852                      |
| (51) A61C 19/06                                              | (51) A61F 2/00                  | 840463                            |
| A61N 1/04                                                    | A61F 5/48                       | (32) 02.06.2011                   |
|                                                              | A61F 13/20                      | 24.02.2011                        |
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| (33) United States of America<br>United States of America<br>United States of America                                                                                                                                                                                                                                                                                                                              | (21) EP18786141.4<br>(47) 14.07.2021<br>(87) US2018052410<br>28.03.2019                                                                                                                                                                                                                                                                                                                         | (33) United States of America<br>United States of America                                                                                                                                                                                                                                                                                                                                                             |
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| (51) A61F 2/24<br>(11) EP3539509<br>(21) EP19164566.2<br>(47) 07.07.2021<br>(22) 27.05.2016<br>(54) CARDIAC VALVE REPAIR DEVICES<br>CONFIGURED FOR PERCUTANEOUS<br>DELIVERY<br>(73) Edwards Lifesciences Corporation<br>(72) TAYLOR, David M.<br>TRAN, Tri D.<br>CHOW, Sean<br>HAUSER, David L.<br>HO, Pui Tong<br>COOPER, Alexander H.<br>(31) 201562169395 P<br>(32) 01.06.2015<br>(33) United States of America | (51) A61F 2/28<br>A61F 2/30<br>A61F 2/44<br>(11) EP3407837<br>(21) EP17704122.5<br>(47) 07.07.2021<br>(87) US2017014029<br>03.08.2017<br>(22) 19.01.2017<br>(54) HELICAL BONE GRAFT<br>CONTAINMENT CAGE<br>(73) DePuy Synthes Products, Inc.<br>(72) DANIEL, Steffan<br>FURRER, Andre<br>LARSEN, Scott<br>(31) 201662288273 P<br>(32) 28.01.2016<br>(33) United States of America               | (51) A61F 2/38<br>(11) EP3572049<br>(21) EP19171270.2<br>(47) 07.07.2021<br>(22) 26.04.2019<br>(54) ORTHOPAEDIC PROSTHETIC SYSTEM<br>FOR A HINGED-KNEE PROTHESIS<br>(73) DePuy Ireland Unlimited Company<br>(72) REEDER, Nathan C<br>HATHAWAY, Tyler S<br>(31) 201815969737<br>(32) 02.05.2018<br>(33) United States of America                                                                                       |
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| (22) 13.05.2014                                                                                                                                                                     | 201662307988 P                                                                                                                                                                                        | FRONDA, Darren Lee                                                                                                                                                                    |
| (54) ADJUSTABLE INTERBODY FUSION<br>DEVICES                                                                                                                                         | 201662317746 P<br>201662372731 P                                                                                                                                                                      | (72) FRONDA, Carl Frank<br>FRONDA, Darren Lee                                                                                                                                         |
| (73) BioSpine, LLC                                                                                                                                                                  | (32) 17.11.2015                                                                                                                                                                                       | (31) 201111717                                                                                                                                                                        |
| (72) NICHOLS, Ross R.<br>REFAI, Dr. Daniel D.<br>EMERICK, Brian G.<br>STAMETS, Heidi                                                                                                | 20.12.2015<br>22.12.2015<br>06.01.2016<br>03.02.2016                                                                                                                                                  | (32) 08.07.2011<br>(33) United Kingdom                                                                                                                                                |
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| (33) United States of America                                                                                                                                                       | 09.08.2016                                                                                                                                                                                            | (21) EP16897277.6<br>(47) 07.07.2021                                                                                                                                                  |
| (51) A61F 2/78<br>A61F 2/80                                                                                                                                                         | (33) United States of America<br>United States of America<br>United States of America<br>United States of America<br>United States of America<br>United States of America<br>United States of America | (87) US2016024592<br>05.10.2017<br>(22) 28.03.2016                                                                                                                                    |
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| (87) GB2017052108<br>25.01.2018                                                                                                                                                     |                                                                                                                                                                                                       | (73) The Regents of the University of<br>California                                                                                                                                   |
| (22) 18.07.2017                                                                                                                                                                     |                                                                                                                                                                                                       | (72) VERGARA, Julio L.<br>PADULA, Andrew<br>ESTRADA, Daniel M.                                                                                                                        |
| (54) SEAL AND SUSPENSION LINER FOR A<br>PROSTHESIS                                                                                                                                  | (51) A61F 6/00<br>B65D 55/06                                                                                                                                                                          | (51) A61F 7/00<br>A61F 7/12<br>A61M 25/00                                                                                                                                             |
| (73) Blatchford Products Limited<br>(72) MCCARTHY, Joseph<br>MCDOUGALL, Alan<br>GALLEGO MURILLO, Ana                                                                                | (11) EP2994080<br>(21) EP14730672.4<br>(47) 07.07.2021<br>(87) US2014037172<br>13.11.2014                                                                                                             | (11) EP3277230<br>(21) EP16774117.2<br>(47) 14.07.2021<br>(87) US2016025030<br>06.10.2016                                                                                             |
| (31) 201612436<br>(32) 18.07.2016<br>(33) United Kingdom                                                                                                                            | (22) 07.05.2014<br>(54) DAMAGE EVIDENT CONDOM<br>PACKAGING                                                                                                                                            | (22) 30.03.2016<br>(54) WORKING FLUID CASSETTE WITH<br>HINGED PLENUM OR ENCLOSURE<br>FOR INTERFACING HEAT<br>EXCHANGER WITH INTRAVASCULAR<br>TEMPERATURE MANAGEMENT<br>CATHETER       |
| (51) A61F 5/01<br>(11) EP3367980<br>(21) EP16763067.2<br>(47) 07.07.2021                                                                                                            | (73) Baby Blue Brand Corp.<br>(72) GAINES, L. Kris<br>JACQUES, Veonous M.<br>JACQUES, Auguste<br>GAINES, David A.<br>MORRISON, Crystal G.                                                             | (73) ZOLL Circulation, Inc.<br>(72) PAMICHEV, Christo Petrov<br>DABROWIAK, Jeremy Thomas                                                                                              |
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| (22) 09.09.2016                                                                                                                                                                     | (32) 07.05.2013<br>27.03.2014                                                                                                                                                                         | (51) A61F 9/00<br>(11) EP2806839<br>(21) EP13712332.9<br>(47) 07.07.2021                                                                                                              |
| (54) ORTHOSIS WITH CONTROLLED<br>ANGULAR EXCURSION                                                                                                                                  | (33) United States of America<br>United States of America                                                                                                                                             | (87) IB2013050721<br>01.08.2013<br>(22) 28.01.2013                                                                                                                                    |
| (73) F.G.P. S.R.L.<br>(72) TURRINI, Alberto<br>FERRIGOLO, Moreno                                                                                                                    |                                                                                                                                                                                                       | (54) DEVICE FOR THE TRANSPLANTATION<br>OF CELLS IN SUSPENSION                                                                                                                         |
| (31) UB20155355<br>(32) 30.10.2015<br>(33) Italy                                                                                                                                    | (51) A61F 7/00<br>(11) EP3636229<br>(21) EP19202777.9<br>(47) 07.07.2021<br>(22) 11.10.2019                                                                                                           | (73) Ecole Polytechnique Fédérale de<br>Lausanne (EPFL)<br>(72) BARRANDON, Yann<br>VAN DEN BERGH, Hubert<br>RENAUD, Philippe<br>BRASCHLER, Thomas<br>GRABER, Julien<br>CAILLIER, Maïa |
| (51) A61F 5/44<br>A61F 5/441<br>A61M 1/00                                                                                                                                           | (54) MACHINE AND SYSTEM FOR<br>CRYOTHERAPY TREATMENT OF A<br>ZONE OF A HUMAN OR ANIMAL BODY                                                                                                           | (31) 12152866<br>(32) 27.01.2012<br>(33) European Patent Office (EPO)                                                                                                                 |
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| (22) 03.11.2016                                                                                                                                                                     |                                                                                                                                                                                                       | (22) 26.06.2012                                                                                                                                                                       |
| (54) SYSTEMS, DEVICES AND METHODS<br>FOR DRAINING AND ANALYZING<br>BODILY FLUIDS                                                                                                    | (51) A61F 7/00<br>A61F 7/02<br>A61F 7/10                                                                                                                                                              | (54) HEADWEAR FOR REMOVING HEAT<br>FROM A PERSON'S SCALP IN ORDER<br>TO PREVENT HAIR LOSS                                                                                             |
| (73) Potrero Medical, Inc.<br>(72) BURNETT, Daniel R.<br>KEENAN, Rich<br>SOKOLOV, Dimitri<br>BOYD, Stephen<br>WILLIAMS, Martin<br>VENKATESWARA-RAO, Kondapavulur<br>ARNEY, Michelle |                                                                                                                                                                                                       |                                                                                                                                                                                       |
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| (47) 07.07.2021                              | A61F 13/02                               | European Patent Office (EPO)       |
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| (54) OPHTHALMIC TREATMENT DEVICE             | (47) 07.07.2021                          | D04H 1/4258                        |
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| (72) KIM, Jong Min                           | (54) PORTABLE NEGATIVE PRESSURE          | (11) EP3354242                     |
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| (51) A61F 9/007                              | Beyrle, Karina                           | (54) FIBER MATERIALS WITH IMPROVED |
| (11) EP2854728                               | Eckstein, Axel                           | PROPERTIES FOR USE IN WOUND        |
| (21) EP13708572.6                            | Hofstetter, Jürgen                       | TREATMENT                          |
| (47) 14.07.2021                              | Croizat, Pierre                          | (73) Mölnlycke Health Care AB      |
| (87) US2013027057                            | Hsieh, Mark                              | (72) CARLSSON, Erik                |
| 28.11.2013                                   | Stein, James                             | (51) A61F 13/08                    |
| (22) 21.02.2013                              | Dawber, Chris                            | D02G 3/04                          |
| (54) SURGICAL HANDPIECE HAVING               | (51) A61F 13/00                          | D04B 1/14                          |
| DIRECTIONAL FLUID CONTROL                    | A61F 13/02                               | D04B 1/26                          |
| CAPABILITIES                                 | A61M 1/00                                | (11) EP3630032                     |
| (73) Johnson & Johnson Surgical Vision, Inc. | (11) EP3592313                           | (21) EP18727272.9                  |
| (72) CLAUS, Michael, J.                      | (21) EP18713460.6                        | (47) 07.07.2021                    |
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| (51) A61F 9/007                              | (54) REDUCED PRESSURE THERAPY            | (73) Bauerfeind AG                 |
| A61F 9/008                                   | SYSTEMS AND METHODS INCLUDING            | (72) BAUERFEIND, Hans B.           |
| A61N 5/06                                    | AN ANTENNA                               | TUTTE, Andreas                     |
| A61N 5/067                                   | (73) Smith & Nephew, Inc                 | THOMÄ, Hans-Jürgen                 |
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| (54) SYSTEM FOR DIRECTING LIGHT INTO         | (51) A61F 13/00                          | (47) 07.07.2021                    |
| A PATIENT'S EYE                              | A61F 13/08                               | (87) DE2014000592                  |
| (73) Multi Radiance Medical                  | F03G 7/06                                | 28.05.2015                         |
| (72) JOHNSON, Douglas                        | (11) EP3638175                           | (22) 19.11.2014                    |
| KANARSKY, Max                                | (21) EP18742843.8                        | (54) DEVICE AND METHOD FOR         |
| FINN, Larry, W.                              | (47) 14.07.2021                          | PRODUCING A COMPOSITE              |
| CAMPBELL, Ian, Dwayne                        | (87) IB2018054216                        | (73) IMECO GMBH & CO. KG           |
| LENK, Jeffrey, A.                            | 20.12.2018                               | (72) HOLTMANN, Michael             |
| BARRETT, Michael, T.                         | (22) 11.06.2018                          | (31) 102013019314                  |
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| (31) 201762540204 P                          | WEARABLE GARMENT COMPRISING              | (32) 20.11.2013                    |
| (32) 02.08.2017                              | A SHAPE MEMORY MATERIAL PART             | 20.11.2013                         |
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| (51) A61F 11/04                              | e Materiais Técnicos, Funcionais e       | Germany                            |
| G02C 11/06                                   | Inteligentes                             | (51) A61F 13/15                    |
| G08B 1/08                                    | Universidade do Minho                    | (11) EP3569207                     |
| G09B 21/00                                   | IPCA - Instituto Politécnico Do Cávado E | (21) EP18173368.4                  |
| H04R 25/00                                   | Ave                                      | (47) 14.07.2021                    |
| (11) EP3625779                               | (72) ALVES DA COSTA GONÇALVES, Carlos    | (22) 18.05.2018                    |
| (21) EP18720329.4                            | Diogo                                    | (54) APPARATUS FOR MAKING AIR-LAID |
| (47) 07.07.2021                              | FERREIRA SIMÕES, Ricardo João            | FIBROUS ARTICLES                   |
| (87) FR2018050935                            | TEIXEIRA DE BARROS FERREIRA DA           | (73) Ontex BV                      |
| 22.11.2018                                   | SILVA, Alexandre Manuel                  | Ontex Group NV                     |
| (22) 13.04.2018                              | DE CARVALHO GOMES, João Manuel           | (72) Zwanckaert, Danny             |
| (54) HEARING ASSISTANCE METHOD AND           | (31) 17175389                            | Descheemaeker, Evan                |
| APPARATUS                                    | 2017110140                               | (51) A61F 13/15                    |
| (73) ORANGE                                  | 18152851                                 | A61F 13/49                         |
| (72) GAILLET, Thierry                        | (32) 11.06.2017                          |                                    |

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| B32B 5/02                          | (51) A61F 13/496                               | (32) 31.03.2017                       |
| B32B 7/04                          | A61F 13/56                                     | (33) Taiwan, Province of China        |
| (11) EP3123993                     | A61F 13/64                                     | (51) A61G 3/06                        |
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| (47) 14.07.2021                    | (21) EP15836908.2                              | (11) EP3064186                        |
| (87) JP2015055560                  | (47) 14.07.2021                                | (21) EP16159046.8                     |
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| (22) 26.02.2015                    | 03.03.2016                                     | (22) 07.03.2016                       |
| (54) METHOD FOR PRODUCING          | (22) 04.02.2015                                | (54) METHOD AND SYSTEM FOR THE        |
| ABSORBENT ARTICLE AND              | (54) WEARABLE ARTICLE HAVING                   | HEIGHT-ADJUSTMENT OF SELF-            |
| ABSORBENT ARTICLE                  | ELASTIC BELT                                   | LOADING STRETCHER SUPPORT IN          |
| (73) Daio Paper Corporation        | (73) The Procter & Gamble Company              | RESCUE VEHICLES AND RESCUE            |
| (72) MORITANI, Akie                | (72) MORIMOTO, Koichi                          | VEHICLE EQUIPPED WITH SAID            |
| (31) 2014065498                    | TONG, Ling                                     | SYSTEM                                |
| (32) 27.03.2014                    | CHENG, Chunmin                                 | (73) Spencer Italia S.R.L.            |
| (33) Japan                         | NISHIKAWA, Masa                                | (72) PIZZI SPADONI, Luigi Cesare      |
| (51) A61F 13/15                    | (31) PCT/CN2014/085239                         | (31) PR20150011                       |
| B29C 65/00                         | (32) 27.08.2014                                | (32) 06.03.2015                       |
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| (22) 19.09.2019                    | A61L 15/46                                     | (21) EP18749316.8                     |
| (54) METHOD AND APPARATUS FOR      | A61L 15/60                                     | (47) 07.07.2021                       |
| MAKING PATTERNED APERTURED         | B01J 20/22                                     | (87) EP2018070067                     |
| SUBSTRATES                         | B01J 20/26                                     | 31.01.2019                            |
| (73) The Procter & Gamble Company  | B01J 20/28                                     | (22) 24.07.2018                       |
| (72) Schneider, Uwe                | B01J 20/30                                     | (54) SELF-BALANCING, SINGLE-AXLE      |
| (31) 201862733107 P                | (11) EP2781259                                 | RUNNING-GEAR UNIT HAVING A            |
| (32) 19.09.2018                    | (21) EP12849458.0                              | STAIR-CLIMBING FUNCTION               |
| (33) United States of America      | (47) 07.07.2021                                | (73) Sauer, Christoph                 |
| (51) A61F 13/42                    | (87) JP2012079660                              | (72) SCHEUERER, Andreas               |
| (11) EP3423016                     | 23.05.2013                                     | FRIEDRICH, Christian                  |
| (21) EP17708670.9                  | (22) 15.11.2012                                | WEIHRAUCH, Felix                      |
| (47) 07.07.2021                    | (54) WATER ABSORBENT COMPOSITION               | SANKTJOHANSER, Simon                  |
| (87) US2017019826                  | AND METHOD FOR PRODUCING                       | LUFT, Thomas                          |
| 08.09.2017                         | SAME, AS WELL AS STORAGE AND                   | SAUER, Christoph                      |
| (22) 28.02.2017                    | STOCKING METHOD FOR SAME                       | (31) 102017007184                     |
| (54) ABSORBENT ARTICLE WITH SENSOR | (73) Nippon Shokubai Co., Ltd.                 | (32) 25.07.2017                       |
| (73) The Procter & Gamble Company  | (72) UEDA, Manabu                              | (33) Germany                          |
| (72) ARIZTI, Blanca                | IKEUCHI, Hiroyuki                              | (51) A61G 7/00                        |
| HASENOEHRL, Erik, John             | NAKASHIMA, Yasuhisa                            | A61G 7/10                             |
| JOYCE, Jonathan, Livingston        | WADA, Katsuyuki                                | (11) EP3616663                        |
| SCHMIDT, Mattias                   | (31) 2011249291                                | (21) EP19194779.5                     |
| SHERMAN, Faiz, Feisal              | (32) 15.11.2011                                | (47) 14.07.2021                       |
| SPECHT, Steven, Jeffrey            | (33) Japan                                     | (22) 30.08.2019                       |
| STRIEMER, Grant, Edward Anders     | (51) A61F 13/84                                | (54) PATIENT TURNING SYSTEM           |
| (31) 16158532                      | A61L 15/46                                     | (73) Hill-Rom Services, Inc.          |
| 201615134035                       | A61L 15/60                                     | (72) KAIKENDER, Philippe              |
| (32) 03.03.2016                    | B01J 20/26                                     | DUVERT, Jean-Bernard                  |
| 20.04.2016                         | C08J 3/24                                      | FLOCARD, Thierry                      |
| (33) European Patent Office (EPO)  | C08K 5/053                                     | LE MELLE, Laurent                     |
| United States of America           | C08L 33/02                                     | (31) 201862725628 P                   |
| (51) A61F 13/42                    | C08L 101/14                                    | (32) 31.08.2018                       |
| (11) EP3478236                     | (11) EP3381972                                 | (33) United States of America         |
| (21) EP17798345.9                  | (21) EP17208092.1                              | (51) A61G 7/053                       |
| (47) 07.07.2021                    | (47) 07.07.2021                                | (11) EP3085348                        |
| (87) NO2017000006                  | (22) 18.12.2017                                | (21) EP16166125.1                     |
| 21.12.2017                         | (54) SUPERABSORBENT POLYMER AND                | (47) 14.07.2021                       |
| (22) 21.02.2017                    | THE METHOD OF FABRICATING THE                  | (22) 20.04.2016                       |
| (54) A SYSTEM FOR DIAPER           | SAME                                           | (54) MEANS FOR AIDING STANDING UP     |
| SURVEILLANCE FOR DETERMINING       | (73) Formosa Plastics Corporation              | AND BED INCORPORATING SAME            |
| THE EXISTENCE AND CLASS OF         | (72) CHEN, Zhong-Yi                            | (73) rehastage GmbH                   |
| HUMAN EXCRETA IN A DIAPER          | CHUANG, Yu-Yen                                 | (72) Heidingsfelder-Bongard, Brigitta |
| (73) Sensor Communication AS       | HUANG, Li-Han                                  | (31) 202015102058 U                   |
| (72) HALVORSEN, Vidar Rinde        | LIN, Yu-Sam                                    | (32) 24.04.2015                       |
| (31) 20161024                      | CHEN, Feng-Yi                                  |                                       |

|                                                                            |                                                                                                                                                 |                                                                                                                                                   |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| (33) Germany                                                               | (31) 1730103                                                                                                                                    | 24.09.2015                                                                                                                                        |
| (51) A61G 7/10                                                             | (32) 10.04.2017                                                                                                                                 | (22) 19.03.2015                                                                                                                                   |
| A61G 12/00                                                                 | (33) Sweden                                                                                                                                     | (54) TREATMENT APPARATUS WITH A LIGHT GUIDE                                                                                                       |
| A61H 3/00                                                                  | (51) A61H 1/02                                                                                                                                  | (73) SEB S.A.                                                                                                                                     |
| B66D 3/18                                                                  | A61H 3/00                                                                                                                                       | (72) GIRAUD, Camille                                                                                                                              |
| F21V 21/096                                                                | (11) EP3636239                                                                                                                                  | GAILHARD, Thierry                                                                                                                                 |
| (11) EP3622935                                                             | (21) EP19193662.4                                                                                                                               | (31) 1452417                                                                                                                                      |
| (21) EP18194108.9                                                          | (47) 07.07.2021                                                                                                                                 | (32) 21.03.2014                                                                                                                                   |
| (47) 14.07.2021                                                            | (22) 27.08.2019                                                                                                                                 | (33) France                                                                                                                                       |
| (22) 12.09.2018                                                            | (54) WALKING ASSISTANCE APPARATUS                                                                                                               | (51) A61H 33/06                                                                                                                                   |
| (54) MAGNETIC SUSPENSION SYSTEM                                            | (73) Samsung Electronics Co., Ltd.                                                                                                              | E04H 1/12                                                                                                                                         |
| (73) TRUMPF Medizin Systeme GmbH + Co. KG                                  | (72) PARK, Youngjin                                                                                                                             | (11) EP3597169                                                                                                                                    |
| (72) DUVERT, Jean-Bernard                                                  | CHOI, Hyun Do                                                                                                                                   | (21) EP18184112.3                                                                                                                                 |
| KAIKENGER, Philippe                                                        | (31) 20180121999                                                                                                                                | (47) 14.07.2021                                                                                                                                   |
| AGDEPPA, Eric                                                              | (32) 12.10.2018                                                                                                                                 | (22) 18.07.2018                                                                                                                                   |
| LÖFFL, Günter                                                              | (33) Korea (Republic)                                                                                                                           | (54) SAUNA                                                                                                                                        |
| SOREEFAN, Ibne                                                             | (51) A61H 1/02                                                                                                                                  | (73) Ripavi Oy                                                                                                                                    |
| (51) A61H 1/00                                                             | A61H 3/00                                                                                                                                       | (72) Koivisto, Juha                                                                                                                               |
| A61H 1/02                                                                  | B25J 11/00                                                                                                                                      | Kuikka, Marko                                                                                                                                     |
| A61H 23/02                                                                 | (11) EP3466395                                                                                                                                  | (51) A61J 1/03                                                                                                                                    |
| A63B 21/00                                                                 | (21) EP17806408.5                                                                                                                               | A61J 7/04                                                                                                                                         |
| A63B 21/005                                                                | (47) 07.07.2021                                                                                                                                 | G01V 8/20                                                                                                                                         |
| A63B 22/00                                                                 | (87) JP2017018803                                                                                                                               | G01S 17/04                                                                                                                                        |
| A63B 22/16                                                                 | 07.12.2017                                                                                                                                      | (11) EP3473977                                                                                                                                    |
| A63B 26/00                                                                 | (22) 19.05.2017                                                                                                                                 | (21) EP17782554.4                                                                                                                                 |
| (11) EP3628299                                                             | (54) ACTUATOR-EQUIPPED KNEE ANKLE FOOT ORTHOSIS                                                                                                 | (47) 07.07.2021                                                                                                                                   |
| (21) EP19198735.3                                                          | (73) Suncall Corporation                                                                                                                        | (87) JP2017015502                                                                                                                                 |
| (47) 14.07.2021                                                            | National University Corporation Kyoto                                                                                                           | 19.10.2017                                                                                                                                        |
| (22) 20.09.2019                                                            | Institute of Technology                                                                                                                         | (22) 17.04.2017                                                                                                                                   |
| (54) VIBRATION DEVICE                                                      | Kyoto University                                                                                                                                | (54) DETECTING DEVICE FOR DETECTING REMOVAL OF ACCOMMODATED OBJECT FROM BLISTER PACK, DETECTING METHOD FOR SAME, AND MEDICATION MANAGEMENT SYSTEM |
| (73) Wacker, Christian                                                     | (72) TAKAHASHI Rei                                                                                                                              | (73) Nippon Frontier Medicine Laboratories, Inc.                                                                                                  |
| Stiefel, Rainer                                                            | SAWADA Yuichi                                                                                                                                   | (72) HIRAZUMI, Kazuki                                                                                                                             |
| (72) Wacker, Andreas                                                       | HIGASHI Yoshiyuki                                                                                                                               | FUKUI, Junichi                                                                                                                                    |
| (31) 202018105557 U                                                        | TSUBOYAMA Tadao                                                                                                                                 | MUSASHI, Kunihiro                                                                                                                                 |
| (32) 27.09.2018                                                            | ICHIHASHI Noriaki                                                                                                                               | (31) 2016082135                                                                                                                                   |
| (33) Germany                                                               | OHATA Koji                                                                                                                                      | (32) 15.04.2016                                                                                                                                   |
| (51) A61H 1/02                                                             | KAWAGUCHI Toshikazu                                                                                                                             | (33) Japan                                                                                                                                        |
| (11) EP3634354                                                             | (31) 2016109755                                                                                                                                 | (51) A61J 1/05                                                                                                                                    |
| (21) EP18729183.6                                                          | (32) 01.06.2016                                                                                                                                 | A61J 1/06                                                                                                                                         |
| (47) 07.07.2021                                                            | (33) Japan                                                                                                                                      | A61J 1/14                                                                                                                                         |
| (87) IB2018053151                                                          | (51) A61H 5/00                                                                                                                                  | A61J 1/20                                                                                                                                         |
| 15.11.2018                                                                 | G02C 7/10                                                                                                                                       | A61L 29/00                                                                                                                                        |
| (22) 07.05.2018                                                            | F21Y 113/00                                                                                                                                     | A61L 29/12                                                                                                                                        |
| (54) EXOSKELETON FOR UPPER ARM                                             | (11) EP3523569                                                                                                                                  | A61M 5/14                                                                                                                                         |
| (73) Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna | (21) EP17859142.6                                                                                                                               | A61M 5/142                                                                                                                                        |
| (72) BALDONI, Andrea                                                       | (47) 14.07.2021                                                                                                                                 | A61M 5/24                                                                                                                                         |
| MOISÉ, Matteo                                                              | (87) US2017055200                                                                                                                               | A61M 5/31                                                                                                                                         |
| CREA, Simona                                                               | 12.04.2018                                                                                                                                      | A61M 5/315                                                                                                                                        |
| TRIGILI, Emilio                                                            | (22) 04.10.2017                                                                                                                                 | A61M 39/08                                                                                                                                        |
| CORTESE, Mario                                                             | (54) LIGHTING SYSTEM FOR SIMULATING CONDITIONS OF COLOR DEFICIENT VISION AND DEMONSTRATING EFFECTIVENESS OF COLORBLINDNESS COMPENSATING EYEWEAR | F04B 43/00                                                                                                                                        |
| VITIELLO, Nicola                                                           | (73) Enchroma, Inc.                                                                                                                             | F04B 43/08                                                                                                                                        |
| GIOVACCHINI, Francesco                                                     | (72) SCHMEDER, Andrew W.                                                                                                                        | (11) EP2844212                                                                                                                                    |
| (31) 201700049732                                                          | (31) 201662405467 P                                                                                                                             | (21) EP13785167.1                                                                                                                                 |
| (32) 08.05.2017                                                            | (32) 07.10.2016                                                                                                                                 | (47) 07.07.2021                                                                                                                                   |
| (33) Italy                                                                 | (33) United States of America                                                                                                                   | (87) US2013038864                                                                                                                                 |
| (51) A61H 1/02                                                             | (51) A61H 15/00                                                                                                                                 | 07.11.2013                                                                                                                                        |
| (11) EP3609454                                                             | A61H 15/02                                                                                                                                      | (22) 30.04.2013                                                                                                                                   |
| (21) EP18724346.4                                                          | A61N 5/06                                                                                                                                       | (54) CONTAINER AND METHOD FOR STORING A PHARMACEUTICAL AGENT                                                                                      |
| (47) 14.07.2021                                                            | (11) EP3125999                                                                                                                                  | (73) Becton, Dickinson and Company                                                                                                                |
| (87) SE2018050352                                                          | (21) EP15715352.9                                                                                                                               |                                                                                                                                                   |
| 18.10.2018                                                                 | (47) 14.07.2021                                                                                                                                 |                                                                                                                                                   |
| (22) 04.04.2018                                                            | (87) FR2015050682                                                                                                                               |                                                                                                                                                   |
| (54) DEVICE AND METHOD FOR FOOT EXERCISE                                   |                                                                                                                                                 |                                                                                                                                                   |
| (73) VQ Innovation                                                         |                                                                                                                                                 |                                                                                                                                                   |
| (72) KOSKELA, Vesa                                                         |                                                                                                                                                 |                                                                                                                                                   |

|                                            |                                      |                                     |
|--------------------------------------------|--------------------------------------|-------------------------------------|
| (72) ALARCON, Javier                       | A61K 9/48                            | G16H 20/17                          |
| RIGGSBEE, William                          | B65B 1/00                            | (11) EP3289499                      |
| HORVATH, Joshua                            | B65H 45/04                           | (21) EP16724763.4                   |
| KOMMIREDY, Dinesh                          | (11) EP3510988                       | (47) 14.07.2021                     |
| PETTIS, Ronald                             | (21) EP18212932.0                    | (87) US2016029925                   |
| (31) 201213463509                          | (47) 14.07.2021                      | 03.11.2016                          |
| (32) 03.05.2012                            | (22) 18.01.2007                      | (22) 29.04.2016                     |
| (33) United States of America              | (54) DELIVERY DEVICE FOR ORAL INTAKE | (54) DETECTION OF MALFUNCTION OF A  |
| (51) A61J 1/06                             | OF AN AGENT                          | FLOW CONTROL APPARATUS              |
| A61J 1/14                                  | (73) Intec Pharma Ltd.               | (73) Covidien LP                    |
| A61J 1/16                                  | (72) TSABARI, Moshe                  | (72) HUDSON, Joseph                 |
| A61J 1/18                                  | BALSHEY, Avner                       | (31) 201562154362 P                 |
| G06K 19/07                                 | YOFE, Erez                           | (32) 29.04.2015                     |
| G06K 19/077                                | (31) 75955406 P                      | (33) United States of America       |
| G09F 3/02                                  | (32) 18.01.2006                      | (51) A61K 6/17                      |
| (11) EP3022688                             | (33) United States of America        | A61K 6/30                           |
| (21) EP14741787.7                          | (51) A61J 7/00                       | A61K 6/77                           |
| (47) 14.07.2021                            | B65B 5/10                            | A61K 6/84                           |
| (87) CH2014000107                          | B65B 35/40                           | A61K 6/887                          |
| 22.01.2015                                 | B65B 35/44                           | (11) EP3381435                      |
| (22) 15.07.2014                            | B65B 51/16                           | (21) EP18164885.8                   |
| (54) MONITORING PRODUCT INTEGRITY          | B65B 57/12                           | (47) 14.07.2021                     |
| OF A PHARMACEUTICAL PRODUCT                | B65B 57/14                           | (22) 29.03.2018                     |
| IN A VIAL USING A MINIATURIZED             | B65B 61/26                           | (54) DENTAL ADHESIVE AGENT AND      |
| ELECTRONIC SENSOR TAG                      | B65G 19/08                           | METHOD OF MANUFACTURING             |
| (73) Berlinger & Co. AG                    | B65G 47/84                           | THEREOF                             |
| (72) TOBESCU, Corneliu                     | (11) EP3590852                       | (73) GC Corporation                 |
| (31) 12722013                              | (21) EP19194166.5                    | (72) Kakinuma, Hiroaki              |
| (32) 16.07.2013                            | (47) 07.07.2021                      | Fujimori, Kensuke                   |
| (33) Switzerland                           | (22) 10.05.2017                      | Matsumoto, Naofumi                  |
| (51) A61J 3/00                             | (54) MEDICINE PACKING APPARATUS      | (31) 2017069563                     |
| B01F 13/10                                 | (73) JVM Co., Ltd.                   | (32) 31.03.2017                     |
| B01F 15/00                                 | (72) KIM, Jun-ho                     | (33) Japan                          |
| B01F 15/02                                 | (31) 20160073565                     | (51) A61K 6/30                      |
| G05D 11/13                                 | 20160086033                          | A61K 6/887                          |
| (11) EP3451107                             | 20160100035                          | (11) EP3346969                      |
| (21) EP18201276.5                          | 20160158954                          | (21) EP16757625.5                   |
| (47) 14.07.2021                            | 20170051118                          | (47) 14.07.2021                     |
| (22) 14.03.2014                            | (32) 14.06.2016                      | (87) EP2016069880                   |
| (54) METHOD FOR COMPOUNDING A              | 07.07.2016                           | 16.03.2017                          |
| PREPARATION USING A PREMIX                 | 05.08.2016                           | (22) 23.08.2016                     |
| SOLUTION                                   | 28.11.2016                           | (54) RADICALLY POLYMERIZABLE DENTAL |
| (73) Baxter Corporation Englewood          | 20.04.2017                           | MATERIAL                            |
| (72) Kaucky, Dennis                        | (33) Korea (Republic)                | (73) Mühlbauer Technology GmbH      |
| Tribble, Dennis A.                         | Korea (Republic)                     | (72) BECKER, Olav-Sven              |
| (31) 201361793652 P                        | Korea (Republic)                     | NEFFGEN, Stephan                    |
| (32) 15.03.2013                            | Korea (Republic)                     | (31) 102015217418                   |
| (33) United States of America              | Korea (Republic)                     | (32) 11.09.2015                     |
| (51) A61J 3/07                             | (51) A61J 15/00                      | (33) Germany                        |
| (11) EP3703644                             | A61M 5/142                           | (51) A61K 8/02                      |
| (21) EP18812253.5                          | A61M 5/168                           | A61K 8/04                           |
| (47) 14.07.2021                            | G16H 20/60                           | A61K 8/14                           |
| (87) IB2018058494                          | G16H 40/63                           | A61K 8/34                           |
| 09.05.2019                                 | (11) EP3049127                       | A61K 8/86                           |
| (22) 30.10.2018                            | (21) EP14780738.2                    | A61K 8/92                           |
| (54) FILLING MACHINE                       | (47) 14.07.2021                      | A61Q 5/12                           |
| (73) I.M.A. Industria Macchine Automatiche | (87) US2014057137                    | A61Q 19/00                          |
| S.p.A                                      | 02.04.2015                           | (11) EP3628304                      |
| (72) RIBANI, Massimo                       | (22) 24.09.2014                      | (21) EP18196989.0                   |
| BEDETTI, Maurizio                          | (54) FEEDING SET AND ENTERAL         | (47) 14.07.2021                     |
| MASOTTI, Alessandro                        | FEEDING PUMP                         | (22) 26.09.2018                     |
| MALDINA, Lorenzo                           | (73) KPR U.S., LLC                   | (54) COSMETIC GEL COMPRISING A      |
| (31) 201700123930                          | (72) HARR, James                     | TRIGLYCERIDE OIL                    |
| (32) 31.10.2017                            | (31) 201361881590 P                  | (73) Clariant International Ltd     |
| (33) Italy                                 | (32) 24.09.2013                      | (72) Dahms, Gerd                    |
| (51) A61J 3/07                             | (33) United States of America        | Wagdare, Nagesh Appasaheb           |
| A61K 9/00                                  | (51) A61J 15/00                      | (51) A61K 8/02                      |
| A61K 9/20                                  | A61M 5/168                           | A61K 8/27                           |

|                                             |                                   |                                      |
|---------------------------------------------|-----------------------------------|--------------------------------------|
| A61Q 17/04                                  | VANPELT, Lisha                    | A61Q 5/08                            |
| B01J 23/06                                  | (31) 201662312048 P               | A61Q 5/10                            |
| C01G 9/02                                   | (32) 23.03.2016                   | (11) EP3558241                       |
| C08K 3/22                                   | (33) United States of America     | (21) EP17829185.2                    |
| (11) EP3668607                              | (51) A61K 8/06                    | (47) 07.07.2021                      |
| (21) EP17851956.7                           | A61K 8/31                         | (87) EP2017083631                    |
| (47) 07.07.2021                             | A61K 9/00                         | 28.06.2018                           |
| (87) TR2017050429                           | A61P 17/00                        | (22) 19.12.2017                      |
| 21.03.2019                                  | A61Q 19/00                        | (54) HAIR COMPOSITION COMPRISING A   |
| (22) 13.09.2017                             | A61K 47/44                        | GUANIDINE SALT, AN ALKANOLAMINE      |
| (54) METHOD FOR PRODUCING                   | (11) EP3349720                    | AND AMMONIUM HYDROXIDE AND           |
| ZINC OXIDE PLATELETS WITH                   | (21) EP16765986.1                 | CATIONIC AND/OR AMPHOTERIC           |
| CONTROLLED SIZE AND                         | (47) 14.07.2021                   | POLYMERS                             |
| MORPHOLOGY                                  | (87) EP2016071718                 | (73) L'Oreal                         |
| (73) Entekno Endüstriyel Teknolojik Ve Nano | 23.03.2017                        | (72) MEGUENI, Amine                  |
| Malzemeler Sanayi Ve Ticaret Anonim         | (22) 14.09.2016                   | HERCOUET, Leila                      |
| Sirketi                                     | (54) BIOSOURCED EMOLLIENT         | (31) 1663023                         |
| (72) SUVACI, Ender                          | COMPOSITION COMPRISING            | (32) 21.12.2016                      |
| (51) A61K 8/04                              | ISOPARAFFINS                      | (33) France                          |
| A61K 8/19                                   | (73) Total Marketing Services     | (51) A61K 8/19                       |
| A61K 8/22                                   | (72) SWOBODA, Benjamin            | A61K 8/34                            |
| A61K 8/31                                   | (31) 15185565                     | A61K 8/41                            |
| A61K 8/365                                  | (32) 16.09.2015                   | A61K 8/43                            |
| A61Q 5/10                                   | (33) European Patent Office (EPO) | A61K 8/72                            |
| (11) EP2771070                              | (51) A61K 8/06                    | A61Q 5/08                            |
| (21) EP12778730.7                           | A61K 8/64                         | A61Q 5/10                            |
| (47) 07.07.2021                             | A61Q 19/00                        | (11) EP3558229                       |
| (87) EP2012071253                           | A61Q 19/08                        | (21) EP17816876.1                    |
| 02.05.2013                                  | C07K 5/10                         | (47) 07.07.2021                      |
| (22) 26.10.2012                             | A61K 47/54                        | (87) EP2017083634                    |
| (54) DEVICE FOR SELF-FOAMING                | (11) EP3416730                    | 28.06.2018                           |
| OXIDATION DYEING, READY-FOR-USE             | (21) EP17710598.8                 | (22) 19.12.2017                      |
| SELF-FOAMING COMPOSITION AND                | (47) 07.07.2021                   | (54) HAIR COMPOSITION COMPRISING A   |
| METHOD FOR DYEING KERATINOUS                | (87) FR2017050373                 | GUANIDINE SALT, AN ALKANOLAMINE,     |
| FIBRES                                      | 24.08.2017                        | AMMONIUM HYDROXIDE AND A             |
| (73) L'Oréal                                | (22) 20.02.2017                   | POLYOL                               |
| (72) SAMAIN, Henri                          | (54) DERMATOLOGICAL COSMETIC      | (73) L'Oreal                         |
| ASCIONE, Jean-Marc                          | COMPOSITION COMPRISING AN         | (72) BODELIN, Sophie                 |
| DE BONI, Maxime                             | SDKP PEPTIDE OR AN ANALOG         | PHELIPOT, Aurelie                    |
| (31) 1159717                                | THEREOF                           | MEGUENI, Amine                       |
| 201161566774 P                              | (73) RPM Dermatologie             | (31) 1663025                         |
| (32) 26.10.2011                             | (72) RIVIERE, Nicolas             | (32) 21.12.2016                      |
| 05.12.2011                                  | (31) 1651328                      | (33) France                          |
| (33) France                                 | (32) 18.02.2016                   | (51) A61K 8/21                       |
| United States of America                    | (33) France                       | A61K 8/365                           |
| (51) A61K 8/04                              | (51) A61K 8/06                    | A61K 8/49                            |
| A61K 8/34                                   | A61K 8/92                         | A61Q 11/00                           |
| A61K 8/44                                   | A61Q 19/00                        | (11) EP3223781                       |
| A61K 8/81                                   | C12P 7/64                         | (21) EP14820850.7                    |
| A61K 36/33                                  | (11) EP3031925                    | (47) 07.07.2021                      |
| A61K 36/886                                 | (21) EP15189670.1                 | (87) EP2014078595                    |
| A61P 17/00                                  | (47) 07.07.2021                   | 23.06.2016                           |
| A61Q 19/00                                  | (22) 14.10.2015                   | (22) 18.12.2014                      |
| A61K 8/97                                   | (54) METHOD FOR PREPARING A WAX-  | (54) MOUTHRINSE FORMULATIONS         |
| (11) EP3432859                              | BASED CARRIER BY ENZYMATIC        | COMPRISING FLUORIDE AND A            |
| (21) EP17771161.1                           | CATALYSIS                         | METAL SALT OF PYRROLIDONE            |
| (47) 14.07.2021                             | (73) GATTEFOSSE SAS               | CARBOXYLIC ACID                      |
| (87) US2017023834                           | (72) RODIER, Jean-David           | (73) GABA International Holding GmbH |
| 28.09.2017                                  | BOULGHOBRA, Hakime                | (72) HINRICHS, Ruth                  |
| (22) 23.03.2017                             | (31) 1462153                      | JAKUMEIT, Stephanie                  |
| (54) COSMETIC COMPOSITIONS AND              | (32) 10.12.2014                   | MATUR, Turan                         |
| USES THEREOF                                | (33) France                       | (51) A61K 8/22                       |
| (73) Mary Kay, Inc.                         | (51) A61K 8/19                    | A61K 8/36                            |
| (72) DURKEE, Barbara                        | A61K 8/34                         | A61K 8/362                           |
| RAMIREZ, Daniel                             | A61K 8/41                         | A61K 8/365                           |
| SANCHEZ, Maria, Milagros                    | A61K 8/43                         | A61K 8/368                           |
| FRUSHOUR, Michael                           | A61K 8/72                         | A61K 8/38                            |
| KALAHASTI, Geetha                           | A61K 8/84                         | A61K 8/41                            |

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| A61Q 5/00                           | (51) A61K 8/34                         | A61K 8/46                         |
| A61Q 5/04                           | A61K 8/362                             | A61Q 5/02                         |
| A61Q 5/06                           | A61K 8/37                              | A61Q 9/02                         |
| A61Q 5/08                           | A61Q 19/00                             | A61Q 19/10                        |
| A61Q 5/10                           | C07C 39/21                             | C11D 1/00                         |
| A61Q 5/12                           | C07C 67/08                             | C11D 1/04                         |
| (11) EP3380062                      | C07C 67/317                            | C11D 1/10                         |
| (21) EP16869326.5                   | C07C 69/675                            | C11D 1/12                         |
| (47) 07.07.2021                     | C07C 69/732                            | C11D 1/28                         |
| (87) US2016063727                   | C09B 23/14                             | C11D 1/83                         |
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| (22) 24.11.2016                     | (21) EP17763831.9                      | (11) EP3458558                    |
| (54) COMPOSITIONS FOR TREATING THE  | (47) 14.07.2021                        | (21) EP17722466.4                 |
| HAIR                                | (87) US2017020923                      | (47) 07.07.2021                   |
| (73) L'OREAL                        | 14.09.2017                             | (87) EP2017061255                 |
| (72) DREHER, Kimberly Christine     | (22) 06.03.2017                        | 23.11.2017                        |
| PROVOT, Gérard                      | (54) RESVERATROL GLYCOLATE AND         | (22) 11.05.2017                   |
| DANIELSKI, Dariusz                  | TARTRATE DERIVATIVES AND               | (54) AQUEOUS TENSIDE COMPOSITIONS |
| BOULINEAU, Fabien Pascal            | SYNTHETIC METHODS THEREFOR             | (73) BASF SE                      |
| GOGET, Caroline Rahmouna Françoise  | (73) ELC Management LLC                | (72) BRUNN, Claudia               |
| POTIN, Anthony                      | (72) MOHAMMADI, Fatemeh                | BEHLER, Ansgar                    |
| CHIN, Allison                       | TAVASOLI, Elham                        | (31) 16170193                     |
| DEGEORGE, Michael                   | (31) 201662304541 P                    | (32) 18.05.2016                   |
| APPLEBAUM, Mara                     | (32) 07.03.2016                        | (33) European Patent Office (EPO) |
| SOLIMAN, Mary Abraam                | (33) United States of America          | (51) A61K 8/49                    |
| FIGATNER, Ashley Ann                | (51) A61K 8/35                         | A61K 31/353                       |
| PAUKER, Megan                       | A61K 8/49                              | A61K 36/38                        |
| APPIAH-AMPONSAH, Emmanuel           | A61K 8/60                              | A61Q 19/08                        |
| (31) 201562259572 P                 | A61Q 5/06                              | A61K 8/97                         |
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| (51) A61K 8/27                      | (21) EP19154882.5                      | (47) 07.07.2021                   |
| A61K 8/73                           | (47) 14.07.2021                        | (22) 21.11.2013                   |
| A61Q 11/00                          | (22) 31.01.2019                        | (54) ANTI-GLYCATION AGENT         |
| (11) EP3380068                      | (54) HAIR COLORING COMPOSITIONS        | COMPRISING A GARCINIA KOLA        |
| (21) EP16836139.2                   | AND METHODS THEREOF                    | EXTRACT OR FRACTION               |
| (47) 07.07.2021                     | (73) KAO USA INC.                      | (73) UNIVERSITE D'ANGERS          |
| (87) US2016068719                   | (72) SCHROTT, Adam                     | Laboratoire Shigeta               |
| 06.07.2017                          | OWENS, Chris                           | (72) Derbre, Séverine             |
| (22) 27.12.2016                     | FISCHER, Vince                         | Morel, Sylvie                     |
| (54) STRIPED DENTIFRICE COMPOSITION | (31) 201815887327                      | Richomme, Pascal                  |
| COMPRISING ZINC                     | (32) 02.02.2018                        | Toure, Alexis Kaatio              |
| (73) Colgate-Palmolive Company      | (33) United States of America          | (31) 1261090                      |
| (72) MOURAO, Marcella, F.           | (51) A61K 8/42                         | (32) 21.11.2012                   |
| POTH, Tilo                          | A61K 8/49                              | (33) France                       |
| CORREA, Fernanda                    | A61K 8/63                              | (51) A61K 8/49                    |
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| (33) United States of America       | A61K 31/58                             | A61Q 5/00                         |
| (51) A61K 8/29                      | A61P 17/14                             | A61Q 7/00                         |
| A61K 8/36                           | A61Q 7/00                              | (11) EP3416643                    |
| A61Q 1/02                           | (11) EP2827952                         | (21) EP17753684.4                 |
| (11) EP3578160                      | (21) EP13764527.1                      | (47) 07.07.2021                   |
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| (47) 14.07.2021                     | (87) US2013031825                      | 24.08.2017                        |
| (22) 01.12.2016                     | 26.09.2013                             | (22) 13.02.2017                   |
| (54) COMPOSITION OF GEL/GEL         | (22) 15.03.2013                        | (54) METHODS OF INCREASING HAIR   |
| TYPE BASED ON HYDROPHOBIC           | (54) COMPOSITION FOR STIMULATING       | GROWTH AND IMPROVING HAIR         |
| COATED PIGMENTS AND A GLYCOL        | HAIR GROWTH                            | APPEARANCE                        |
| COMPOUND                            | (73) The Trustees Of The University Of | (73) MYMD PHARMACEUTICALS, INC.   |
| (73) L'OREAL                        | Pennsylvania                           | (72) WILLIAMS, Jonnie R.          |
| (72) VALVERDE, Elodie               | (72) COTSARELIS, George                | (31) 201662295618 P               |
| (31) 1562601                        | FITZGERALD, Garret                     | (32) 16.02.2016                   |
| 1562607                             | GARZA, Luis                            | (33) United States of America     |
| (32) 17.12.2015                     | (31) 201261613829 P                    | (51) A61K 8/49                    |
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| France                              | (51) A61K 8/44                         | C07C 43/305                       |

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| C11B 9/00                         | (21) EP12799223.8                              | A61P 43/00                            |
| (11) EP3668850                    | (47) 07.07.2021                                | (11) EP2968218                        |
| (21) EP18814810.0                 | (87) EP2012075421                              | (21) EP14718177.0                     |
| (47) 14.07.2021                   | 27.06.2013                                     | (47) 07.07.2021                       |
| (87) EP2018082821                 | (22) 13.12.2012                                | (87) IL2014050261                     |
| 06.06.2019                        | (54) PIGMENT DYEING COMPOSITION                | 18.09.2014                            |
| (22) 28.11.2018                   | BASED ON A PARTICULAR ACRYLIC                  | (22) 13.03.2014                       |
| (54) AMBER ODORANT                | POLYMER AND ON SILICONE                        | (54) COMBINATION FOR THE TREATMENT    |
| (73) Firmenich SA                 | COPOLYMER, AND DYEING METHOD                   | OF PARKINSON'S DISEASE                |
| (72) LEM, George                  | (73) L'OREAL                                   | (73) Neuroderm Ltd                    |
| (31) 17204079                     | (72) TEBOUL, Karen                             | (72) YACOBY-ZEEVI, Oron               |
| (32) 28.11.2017                   | (31) 1162003                                   | (31) 201361779357 P                   |
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| (51) A61K 8/49                    | (32) 20.12.2011                                | (33) United States of America         |
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| A61Q 19/00                        | (33) France                                    | A61K 9/107                            |
| A61Q 19/08                        | United States of America                       | A61K 9/127                            |
| (11) EP3658111                    | (51) A61K 8/81                                 | A61K 9/16                             |
| (21) EP18729359.2                 | A61Q 5/06                                      | A61K 31/337                           |
| (47) 07.07.2021                   | (11) EP3621587                                 | A61K 31/436                           |
| (87) EP2018063654                 | (21) EP18716969.3                              | A61K 31/704                           |
| 31.01.2019                        | (47) 14.07.2021                                | A61K 49/00                            |
| (22) 24.05.2018                   | (87) EP2018058442                              | A61K 51/12                            |
| (54) ACTIVE SUBSTANCE             | 15.11.2018                                     | A61K 47/42                            |
| COMBINATIONS OF N-(4-AMINO-2-     | (22) 03.04.2018                                | A61K 47/54                            |
| METHYLQUINOLINE-6-YL)-2-((4-      | (54) HAIR STYLING COMPRISING                   | A61K 47/60                            |
| ETHYLPHENOXY)METHYL)BENZAMIDE     | POLYQUATERNIUM-4,POLYQUATERNIUM-13             | (11) EP3046586                        |
| AND ONE OR MORE COSMETICALLY      | AND C12-15 ALKYL BENZOATE                      | (21) EP14845308.7                     |
| OR DERMATOLOGICALLY               | (73) Beiersdorf AG                             | (47) 07.07.2021                       |
| ACCEPTABLE AROMATIC               | (72) CAO, Mi                                   | (87) US2014056287                     |
| SUBSTANCES                        | (31) PCT/CN2017/084151                         | 26.03.2015                            |
| (73) Beiersdorf AG                | (32) 12.05.2017                                | (22) 18.09.2014                       |
| (72) SIEFKEN, Wilfried            | (33) World Intellectual Property Office (WIPO) | (54) METHODS OF TREATMENT USING       |
| REUTER, Jörn Hendrik              | (51) A61K 9/00                                 | BIS-POLYMER LIPID-PEPTIDE             |
| SKUBSCH, Kerstin                  | A61K 9/08                                      | CONJUGATES AND NANOPARTICLES          |
| (31) 102017212646                 | A61K 9/14                                      | THEREOF                               |
| (32) 24.07.2017                   | A61K 9/16                                      | (73) The Regents of the University of |
| (33) Germany                      | A61K 9/19                                      | California                            |
| (51) A61K 8/49                    | A61K 9/20                                      | (72) XU, Ting                         |
| A61Q 17/04                        | A61K 9/48                                      | DUBE, Nikhil                          |
| A61Q 19/00                        | A61K 31/506                                    | (31) 201361880068 P                   |
| A61Q 19/08                        | A61P 35/02                                     | 201361889324 P                        |
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| (47) 14.07.2021                   | (47) 14.07.2021                                | (33) United States of America         |
| (87) EP2018063797                 | (87) IN2016050035                              | United States of America              |
| 31.01.2019                        | 22.06.2017                                     | (51) A61K 9/00                        |
| (22) 25.05.2018                   | (22) 30.01.2016                                | A61K 9/14                             |
| (54) ACTIVE SUBSTANCE             | (54) PHARMACEUTICAL                            | A61K 31/496                           |
| COMBINATIONS OF N-(4-AMINO-2-     | COMPOSITIONS COMPRISING                        | (11) EP3508196                        |
| METHYLQUINOLINE-6-YL)-2-((4-      | PHENYLAMINOPYRIMIDINE                          | (21) EP19154013.7                     |
| ETHYLPHENOXY)METHYL)BENZAMIDE     | DERIVATIVE                                     | (47) 14.07.2021                       |
| AND ONE OR MORE COSMETICALLY      | (73) NATCO PHARMA LTD                          | (22) 17.08.2015                       |
| OR DERMATOLOGICALLY               | (72) PARVATANENI, Durga Maheswari              | (54) ARIPIPRAZOLE PRODRUG             |
| ACCEPTABLE PRESERVATIVES AND/     | MOHANTY, Mitrabhanu                            | COMPOSITIONS                          |
| OR PRESERVATIVE AUXILIARIES       | APPADWEDULA, Venkata                           | (73) Alkermes Pharma Ireland Limited  |
| (73) Beiersdorf AG                | Satyanarayana                                  | (72) CRESSWELL, Philip                |
| (72) SIEFKEN, Wilfried            | ADIBHATLA, Kali Satya Bhujanga Rao             | HICKEY, Magali                        |
| REUTER, Jörn Hendrik              | NANNAPANENI, Venkaiah Chowdary                 | LIVERSIDGE, Elaine                    |
| SKUBSCH, Kerstin                  | (31) 6951CH2015                                | MANSER, David                         |
| (31) 102017212647                 | (32) 18.12.2015                                | PALMIERI, Michael Jr.                 |
| (32) 24.07.2017                   | (33) India                                     | PAQUETTE, Sara Montminy               |
| (33) Germany                      | (51) A61K 9/00                                 | PERKIN, Kristopher                    |
| (51) A61K 8/81                    | A61K 9/08                                      | SMITH, Greg                           |
| A61K 8/895                        | A61K 31/121                                    | STEINBERG, Brian                      |
| A61Q 1/10                         | A61K 31/198                                    | TURNCLIFF, Ryan                       |
| A61Q 5/06                         | A61K 31/277                                    | ZEIDAN, Tarek                         |

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| CASH, Ethan P.                       | A61P 11/00                            | (11) EP3045162                 |
| HARD, Marjie L.                      | A61P 13/12                            | (21) EP16155350.8              |
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| (32) 18.08.2014                      | A61P 37/02                            | (54) OPIOID FORMULATIONS       |
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| (33) European Patent Office (EPO)    | (11) EP3137054                        | (72) TIBERG, Fredrik           |
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| (51) A61K 9/00                       | (47) 07.07.2021                       | JOHNSSON, Markus               |
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| (11) EP3576718                       | ANTI-LYST IMMUNOMODULATION            | (33) United States of America  |
| (21) EP18705271.7                    | (73) Research Institute at Nationwide | United States of America       |
| (47) 14.07.2021                      | Children's Hospital                   | (51) A61K 9/00                 |
| (87) US2018016062                    | (72) BREUER, Christopher              | A61K 31/724                    |
| 09.08.2018                           | HIBINO, Narutoshi                     | A61K 31/728                    |
| (22) 31.01.2018                      | GARG, Vidu                            | A61K 38/17                     |
| (54) A LOZENGE                       | BEST, Cameron                         | A61K 38/20                     |
| (73) Johnson & Johnson Consumer Inc. | (31) 201461987910 P                   | A61K 39/00                     |
| (72) THYRESSON, Kristina             | (32) 02.05.2014                       | A61K 45/06                     |
| SIVERSSON, Carina                    | (33) United States of America         | A61P 25/00                     |
| BISRAT, Mikael                       | (51) A61K 9/00                        | A61P 27/02                     |
| LINDELL, Katarina                    | A61K 31/192                           | A61P 27/04                     |
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| (11) EP3576719                       | LEAST ONE WATER-SOLUBLE               | 16.07.2009                     |
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| (47) 07.07.2021                      | SALT OF ELAFIBRANOR HAVING            | (54) THERAPEUTIC COMPOSITIONS  |
| (87) US2018017019                    | IMPROVED INTESTINAL ABSORPTION        | FOR TREATMENT OF OCULAR        |
| 09.08.2018                           | (73) Nashpharm                        | INFLAMMATORY DISORDERS         |
| (22) 06.02.2018                      | (72) LARUELLE, Claude                 | (73) THE SCHEPENS EYE RESEARCH |
| (54) ABUSE DETERRENT FORMULATIONS    | BONNAFOUS, Ludovic                    | INSTITUTE, INC.                |
| OF AMPHETAMINE                       | (31) 1659438                          | (72) DANA, Reza                |
| (73) Vallon Pharmaceuticals, Inc.    | (32) 30.09.2016                       | CHAUHAN, Sunil                 |
| (72) BAKER, David                    | (33) France                           | (31) 10566                     |
| DANIELY, Yaron                       | (51) A61K 9/00                        | (32) 09.01.2008                |
| RON, Hanna                           | A61K 31/40                            | (33) United States of America  |
| SINER, David                         | (11) EP3621589                        | (51) A61K 9/00                 |
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| (33) United States of America        | (22) 09.05.2018                       | A61P 17/10                     |
| United States of America             | (54) A PROCESS FOR PREPARING A        | A61K 35/741                    |
| (51) A61K 9/00                       | DRY POWDER FORMULATION                | A61K 47/42                     |
| A61K 31/00                           | COMPRISING AN ANTICHOLINERGIC,        | (11) EP3528825                 |
| A61K 31/7105                         | A CORTICOSTEROID AND A BETA-          | (21) EP17835861.0              |
| A61K 31/713                          | ADRENERGIC                            | (47) 14.07.2021                |
| A61L 27/36                           | (73) Chiesi Farmaceutici S.p.A.       | (87) IB2017001481              |
| A61L 27/50                           | (72) CAVECCHI, Alessandro             | 26.04.2018                     |
| A61L 27/54                           | MERUSI, Cristiana                     | (22) 19.10.2017                |
| A61L 29/16                           | PIVETTI, Fausto                       | (54) METHODS AND COMPOSITIONS  |
| A61L 31/00                           | SCHIARETTI, Francesca                 | FOR CHANGING THE COMPOSITION   |
| A61L 31/16                           | (31) 17170632                         | OF THE SKIN MICROBIOME USING   |
| A61P 1/16                            | (32) 11.05.2017                       | COMPLEX MIXTURES OF BACTERIAL  |
| A61P 7/00                            | (33) European Patent Office (EPO)     | STRAINS                        |
| A61P 7/02                            | (51) A61K 9/00                        | (73) S-Biomedic NV             |
| A61P 9/00                            | A61K 31/485                           | (72) PÄTZOLD, Bernhard         |
| A61P 9/10                            | A61K 47/34                            | GÜELL, Marc                    |



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| (32) 19.10.2016<br>25.07.2017                                                                                                             | (54) A METHOD OF TREATMENT OF<br>FUNGAL INFECTIONS                                                                                                                       | (22) 03.02.2015                                                                                       |
| (33) United States of America<br>United States of America                                                                                 | (73) Hexima Limited                                                                                                                                                      | (54) NANOSUSPENSION OF NATURAL<br>MATERIALS AND PREPARATION<br>METHOD THEREOF                         |
| (51) A61K 9/00<br>A61K 38/20<br>A61K 47/26<br>A61K 47/10                                                                                  | (72) VAN DER WEERDEN, Nicole Louise<br>ANDERSON, Marilyn Anne                                                                                                            | (73) Apurano Pharmaceuticals GmbH                                                                     |
| (11) EP2968468                                                                                                                            | (31) 201462066808 P                                                                                                                                                      | (72) BRAND, Werner                                                                                    |
| (21) EP14722435.6                                                                                                                         | (32) 21.10.2014                                                                                                                                                          | (31) 14153705                                                                                         |
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| (22) 13.03.2014                                                                                                                           | (11) EP3389690                                                                                                                                                           | (33) European Patent Office (EPO)<br>World Intellectual Property Office (WIPO)                        |
| (54) CHIMERIC CYTOKINE<br>FORMULATIONS FOR OCULAR<br>DELIVERY                                                                             | (21) EP16876755.6                                                                                                                                                        | (51) A61K 9/10<br>A61K 9/50<br>A61K 31/402<br>A61K 31/451<br>A61K 31/496<br>A61P 17/00                |
| (73) Buzzard Pharmaceuticals AB                                                                                                           | (47) 07.07.2021                                                                                                                                                          | (11) EP3302421                                                                                        |
| (72) ZARBIS-PAPASTOITSIS, Gregory<br>LOWDEN, Patricia<br>CHANG, Byeong                                                                    | (87) US2016067132<br>22.06.2017                                                                                                                                          | (21) EP16731621.5                                                                                     |
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| 13.10.2016                                   | AMINOETHANESULFONIC ACID             | C07D 235/28                          |
| (22) 08.04.2016                              | (73) Zwickl, Markus                  | C07D 307/68                          |
| (54) INHIBITORS AND THEIR USES               | (72) ZWICKL, Markus                  | C07D 317/60                          |
| (73) United Kingdom Research and             | (31) 13152170                        | C07D 471/04                          |
| Innovation                                   | 13163915                             | C07D 493/04                          |
| (72) BERTOLOTI, Anne                         | (32) 22.01.2013                      | (11) EP2991963                       |
| DAS, Indrajit                                | 16.04.2013                           | (21) EP14719748.7                    |
| KRZYZOSIAK, Agnieszka                        | (33) European Patent Office (EPO)    | (47) 07.07.2021                      |
| ROUSSEAU, Adrien                             | European Patent Office (EPO)         | (87) EP2014058449                    |
| SCHNEIDER, Kim                               | (51) A61K 31/19                      | 06.11.2014                           |
| SIGURDARDOTTIR, Anna Gudny                   | A61K 31/4545                         | (22) 25.04.2014                      |

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|-------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| (54) INHIBITORS OF NHR2 AND/OR RUNX1/ETO-TETRAMERIZATION                      | A61P 3/04                                                     | A61L 31/16                                                                                |
| (73) Heinrich-Heine-Universität Düsseldorf                                    | (11) EP3621605                                                | A61P 9/10                                                                                 |
| (72) METZ, Alexander                                                          | (21) EP18722567.7                                             | (11) EP3366321                                                                            |
| GOHLKE, Holger                                                                | (47) 07.07.2021                                               | (21) EP18158395.6                                                                         |
| SCHANDA, Julia                                                                | (87) EP2018062203                                             | (47) 14.07.2021                                                                           |
| WICHMANN, Christian                                                           | 15.11.2018                                                    | (22) 23.02.2018                                                                           |
| GREZ, Manuel                                                                  | (22) 11.05.2018                                               | (54) DRUG-COATED MEDICAL DEVICES                                                          |
| (31) 13165993                                                                 | (54) BETAINE FOR THE PREVENTION OF OBESITY                    | (73) Medtronic Vascular Inc.                                                              |
| (32) 30.04.2013                                                               | (73) Hospital Sant Joan de Deu                                | (72) RAINA, Shashank                                                                      |
| (33) European Patent Office (EPO)                                             | (72) LERÍN MARTÍNEZ, Carlos                                   | (31) 201762462399 P                                                                       |
| (51) A61K 31/196                                                              | JIMÉNEZ CHILLARÓN, José Carlos                                | (32) 23.02.2017                                                                           |
| A61K 31/7012                                                                  | RAMÓN KRAUEL, Marta                                           | (33) United States of America                                                             |
| A61P 31/00                                                                    | (31) 17382270                                                 | (51) A61K 31/337                                                                          |
| A61P 31/04                                                                    | (32) 12.05.2017                                               | A61P 35/00                                                                                |
| A61P 31/16                                                                    | (33) European Patent Office (EPO)                             | A61P 35/04                                                                                |
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| (47) 14.07.2021                                                               | A61P 13/12                                                    | A61K 38/095                                                                               |
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| (22) 17.10.2018                                                               | A61P 35/00                                                    | (47) 14.07.2021                                                                           |
| (54) NOVEL MEK-INHIBITOR FOR THE TREATMENT OF VIRAL AND BACTERIAL INFECTIONS  | C07C 69/16                                                    | (87) CA2016050362                                                                         |
| (73) Atriva Therapeutics GmbH                                                 | (11) EP2943463                                                | 06.10.2016                                                                                |
| (72) LUDWIG, Stephan                                                          | (21) EP14709750.5                                             | (22) 29.03.2016                                                                           |
| PLANZ, Oliver                                                                 | (47) 14.07.2021                                               | (54) TREATING PROSTATE CANCER                                                             |
| (31) 100487                                                                   | (87) IL2014050023                                             | (73) Sunnybrook Research Institute                                                        |
| (32) 17.10.2017                                                               | 17.07.2014                                                    | (72) KLOTZ, Laurence H.                                                                   |
| (33) Luxembourg                                                               | (22) 08.01.2014                                               | VENKATESWARAN, Vasundara                                                                  |
| (51) A61K 31/198                                                              | (54) FLUORINATED CBD COMPOUNDS, COMPOSITIONS AND USES THEREOF | (31) 201562139976 P                                                                       |
| A61K 31/337                                                                   | (73) Yissum Research Development                              | (32) 30.03.2015                                                                           |
| A61K 31/4422                                                                  | Company Of The Hebrew University Of Jerusalem Ltd.            | (33) United States of America                                                             |
| A61P 35/00                                                                    | Universidade de São Paulo - USP                               | (51) A61K 31/343                                                                          |
| (11) EP3129015                                                                | Universidade Federal Do Rio Grande Do Sulufgrs                | A61K 31/519                                                                               |
| (21) EP15719050.5                                                             | (72) MECOULAM, Raphael                                        | A61K 31/5377                                                                              |
| (47) 14.07.2021                                                               | ZUARDI, Antonio Waldo                                         | A61K 31/7068                                                                              |
| (87) US2015025009                                                             | KAPCZINSKI, Flavio Pereira                                    | A61K 39/00                                                                                |
| 15.10.2015                                                                    | HALLAK, Jaime Eduardo Cecilio                                 | A61K 39/395                                                                               |
| (22) 08.04.2015                                                               | GUIMARAES, Francisco Silveira                                 | A61K 45/06                                                                                |
| (54) INOS-INHIBITORY COMPOSITIONS AND THEIR USE AS BREAST CANCER THERAPEUTICS | CRIPPA, Jose Alexandre de Souza                               | A61P 35/00                                                                                |
| (73) The Methodist Hospital                                                   | BREUER, Aviva                                                 | C07K 16/40                                                                                |
| (72) CHANG, Jenny Chee Ning                                                   | (31) 201361750043 P                                           | C12Q 1/02                                                                                 |
| (31) 201461976956 P                                                           | (32) 08.01.2013                                               | G01N 33/50                                                                                |
| (32) 08.04.2014                                                               | (33) United States of America                                 | G01N 33/574                                                                               |
| (33) United States of America                                                 | (51) A61K 31/335                                              | A61K 47/68                                                                                |
| (51) A61K 31/202                                                              | A61P 35/00                                                    | A61K 33/24                                                                                |
| A61P 29/00                                                                    | A61P 37/00                                                    | (11) EP3348276                                                                            |
| C07C 57/03                                                                    | C07D 303/46                                                   | (21) EP16844474.3                                                                         |
| (11) EP3003299                                                                | (11) EP3386956                                                | (47) 14.07.2021                                                                           |
| (21) EP14805125.3                                                             | (21) EP16816157.8                                             | (87) JP2016076542                                                                         |
| (47) 14.07.2021                                                               | (47) 14.07.2021                                               | 16.03.2017                                                                                |
| (87) US2014037969                                                             | (87) US2016065799                                             | (22) 09.09.2016                                                                           |
| 04.12.2014                                                                    | 15.06.2017                                                    | (54) CANCER TREATMENT COMPOSITION COMBINING ANTI-CD26 ANTIBODY AND OTHER ANTICANCER AGENT |
| (22) 14.05.2014                                                               | (22) 09.12.2016                                               | (73) Y'S AC Co., Ltd.                                                                     |
| (54) NOVEL N-3 IMMUNORESOLVENTS: STRUCTURES AND ACTIONS                       | (54) FUMAGILLOL DERIVATIVES AND POLYMORPHS THEREOF            | (72) YAMADA, Taketo                                                                       |
| (73) The Brigham and Women's Hospital, Inc.                                   | (73) Syndevrx, Inc.                                           | HAYASHI, Mutsumi                                                                          |
| (72) SERHAN, Charles N.                                                       | (72) PETERSEN, John S.                                        | YAMADA, Kohji                                                                             |
| DALLI, Jesmond                                                                | (31) 201562265675 P                                           | MORIMOTO, Chikao                                                                          |
| (31) 201361829064 P                                                           | (32) 10.12.2015                                               | OKAMOTO, Toshihiro                                                                        |
| (32) 30.05.2013                                                               | (33) United States of America                                 | KANEKO, Yutaro                                                                            |
| (33) United States of America                                                 | (51) A61K 31/337                                              | (31) 2015179672                                                                           |
| (51) A61K 31/205                                                              | A61L 29/06                                                    | (32) 11.09.2015                                                                           |
| A61K 31/285                                                                   | A61L 29/16                                                    | (33) Japan                                                                                |
|                                                                               | A61L 31/06                                                    | (51) A61K 31/352                                                                          |
|                                                                               |                                                               | A61K 31/70                                                                                |
|                                                                               |                                                               | A61P 29/00                                                                                |
|                                                                               |                                                               | C07D 311/30                                                                               |

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|---------------------------------------------|--------------------------------------------|--------------------------------|
| C07D 311/32                                 | (51) A61K 31/40                            | (32) 06.06.2013                |
| C07D 407/14                                 | A61K 31/41                                 | 31.01.2014                     |
| C07H 17/07                                  | A61K 31/4439                               | (33) United States of America  |
| (11) EP2933251                              | A61K 31/506                                | United States of America       |
| (21) EP15163454.0                           | A61P 1/16                                  | (51) A61K 31/404               |
| (47) 07.07.2021                             | A61P 9/00                                  | A61K 31/495                    |
| (22) 14.04.2015                             | A61P 11/00                                 | A61K 31/506                    |
| (54) PHARMACEUTICAL COMPOSITION             | A61P 11/14                                 | A61K 31/5377                   |
| USABLE FOR THE TREATMENT OF                 | A61P 13/10                                 | A61P 35/00                     |
| A PATHOLOGY OF THE FOOT OF A                | C07D 207/48                                | C07D 401/14                    |
| HOOFFED MAMMAL                              | C07D 401/12                                | C07D 403/04                    |
| (73) Weyts, Peter                           | C07D 403/12                                | C07D 403/14                    |
| Bourgeois, Celine                           | C07D 413/12                                | (11) EP3514153                 |
| (72) Weyts, Peter M.                        | C07D 498/10                                | (21) EP18744290.0              |
| (31) 1453382                                | (11) EP3515887                             | (47) 07.07.2021                |
| (32) 15.04.2014                             | (21) EP17784400.8                          | (87) KR2018001193              |
| (33) France                                 | (47) 07.07.2021                            | 02.08.2018                     |
| (51) A61K 31/352                            | (87) IB2017055700                          | (22) 26.01.2018                |
| A61P 35/00                                  | 29.03.2018                                 | (54) PYRIMIDINE COMPOUND AND   |
| C07D 311/78                                 | (22) 20.09.2017                            | PHARMACEUTICAL USE THEREOF     |
| C07D 405/04                                 | (54) TRPV4 ANTAGONISTS                     | (73) Hanmi Pharm. Co., Ltd.    |
| C07D 491/08                                 | (73) GlaxoSmithKline Intellectual Property | (72) HAM, Young Jin            |
| C07D 493/08                                 | (No. 2) Limited                            | KANG, Seok Jong                |
| C07D 493/18                                 | (72) BRNARDIC, Edward J.                   | CHOI, Jae Yul                  |
| C07D 498/08                                 | BROOKS, Carl A.                            | KIM, Seo Hee                   |
| C07D 513/08                                 | LAWHORN, Brian Griffin                     | KIM, Tae Woo                   |
| C07D 515/08                                 | YE, Guosen                                 | BAE, In Hwan                   |
| (11) EP2981529                              | BARTON, Linda S.                           | AHN, Young Gil                 |
| (21) EP14778536.4                           | BUDZIK, Brian W.                           | SUH, Kwee Hyun                 |
| (47) 14.07.2021                             | MATTHEWS, Jay M.                           | (31) 20170012766               |
| (87) US2014033111                           | MCATEE, John Jeffrey                       | (32) 26.01.2017                |
| 09.10.2014                                  | PATTERSON, Jaclyn R.                       | (33) Korea (Republic)          |
| (22) 05.04.2014                             | PERO, Joseph E.                            | (51) A61K 31/404               |
| (54) ORIDONIN ANALOGS,                      | SANCHEZ, Robert                            | A61P 25/00                     |
| COMPOSITIONS, AND METHODS                   | SENDER, Matthew Robert                     | C07D 401/14                    |
| RELATED THERETO                             | TERRELL, Lamont Roscoe                     | C07D 403/06                    |
| (73) The Board of Regents of The University | BEHM, David J.                             | C07D 405/14                    |
| of Texas System                             | THOMAS, James V.                           | (11) EP3634957                 |
| (72) ZHOU, Jia                              | (31) 201662396991 P                        | (21) EP18727799.1              |
| DING, Chunyong                              | 201762482296 P                             | (47) 07.07.2021                |
| SHEN, Qiang                                 | (32) 20.09.2016                            | (87) EP2018064093              |
| (31) 201361808753 P                         | 06.04.2017                                 | 13.12.2018                     |
| (32) 05.04.2013                             | (33) United States of America              | (22) 29.05.2018                |
| (33) United States of America               | United States of America                   | (54) NMDA RECEPTOR MODULATORS, |
| (51) A61K 31/395                            | (51) A61K 31/40                            | COMPOSITIONS COMPRISING SAME   |
| A61P 31/12                                  | A61K 39/00                                 | AND USE OF THESE COMPOUNDS     |
| A61P 35/00                                  | A61P 35/00                                 | IN THE TREATMENT OF DISEASES   |
| C07D 487/04                                 | A61P 35/02                                 | INVOLVING THE CENTRAL NERVOUS  |
| (11) EP3546457                              | A61P 37/02                                 | SYSTEM                         |
| (21) EP17874091.6                           | A61P 37/06                                 | (73) Adpuerivitam              |
| (47) 14.07.2021                             | A61P 43/00                                 | (72) ALAMI, Mouâd              |
| (87) CN2017113007                           | C07K 16/28                                 | BRION, Jean-Daniel             |
| 31.05.2018                                  | A61K 47/68                                 | MESSAOUDI, Samir               |
| (22) 27.11.2017                             | (11) EP3003390                             | TOUCHET, Sabrina               |
| (54) PYRAZOLO-HETEROARYL                    | (21) EP14807930.4                          | GALVANI, Gilles                |
| DERIVATIVE, PREPARATION METHOD              | (47) 07.07.2021                            | DULAC, Olivier                 |
| AND MEDICAL USE THEREOF                     | (87) US2014041388                          | GATAULLINA, Svetlana           |
| (73) Jiangsu Hengrui Medicine Co., Ltd.     | 11.12.2014                                 | NOUS, Caroline                 |
| Shanghai Hengrui Pharmaceutical Co.,        | (22) 06.06.2014                            | (31) 1754993                   |
| Ltd.                                        | (54) ANTI-C10ORF54 ANTIBODIES AND          | (32) 06.06.2017                |
| (72) ZHANG, Guobao                          | USES THEREOF                               | (33) France                    |
| SHU, Chunfeng                               | (73) Pierre Fabre Médicament               | (51) A61K 31/404               |
| HU, Qiyue                                   | (72) LIPPINCOTT, John                      | A61P 31/12                     |
| HE, Feng                                    | VAN DER HORST, Edward, Thein Htun          | C07D 209/12                    |
| TAO, Weikang                                | KIM, Sun, Young                            | (11) EP3350162                 |
| (31) 201611066071                           | PRESTA, Leonard, G.                        | (21) EP16766010.9              |
| (32) 28.11.2016                             | (31) 201361832135 P                        | (47) 14.07.2021                |
| (33) China                                  | 201461934615 P                             | (87) EP2016071845              |

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| 23.03.2017                           | (54) COMPOSITION COMPRISING AT    | (47) 07.07.2021                                |
| (22) 15.09.2016                      | LEAST ONE ENZYME AND AT LEAST     | (87) US2017030414                              |
| (54) MONO- OR DI-SUBSTITUTED INDOLE  | ONE MICROBICIDAL MOLECULE FOR     | 09.11.2017                                     |
| DERIVATIVES AS DENGUE VIRAL          | TREATMENT OR PREVENTION OF        | (22) 01.05.2017                                |
| REPLICATION INHIBITORS               | POST-IMPLANTATION INFECTIONS      | (54) POLYMORPHIC FORMS OF 3-                   |
| (73) Janssen Pharmaceuticals, Inc.   | (73) OneLIFE S.A.                 | [2-BUTYL-1-(2-DIETHYLAMINO-                    |
| Katholieke Universiteit Leuven       | (72) SIALA, M. Wafi               | ETHYL)-1H-BENZOIMIDAZOL-5-YL]-N-               |
| (72) KESTELEYN, Bart Rudolf Romanie  | VANZIELEGHEM, M. Thomas           | HYDROXY-ACRYLAMIDE AND USES                    |
| RABOISSON, Pierre Jean-Marie Bernard | (31) 201605427                    | THEREOF                                        |
| BONFANTI, Jean-François              | 16173468                          | (73) MEI Pharma, Inc.                          |
| JONCKERS, Tim Hugo Maria             | (32) 08.06.2016                   | (72) DUNCAN, David                             |
| BARDIOT, Dorothée Alice Marie-Eve    | 08.06.2016                        | (31) 201662330673 P                            |
| MARCHAND, Arnaud Didier M            | (33) Belgium                      | (32) 02.05.2016                                |
| (31) 15185523                        | European Patent Office (EPO)      | (33) United States of America                  |
| 16163472                             | (51) A61K 31/415                  | (51) A61K 31/4192                              |
| (32) 16.09.2015                      | A61P 11/00                        | A61K 31/454                                    |
| 01.04.2016                           | (11) EP3585382                    | A61K 31/496                                    |
| (33) European Patent Office (EPO)    | (21) EP18819365.0                 | A61K 31/5377                                   |
| European Patent Office (EPO)         | (47) 14.07.2021                   | A61P 35/00                                     |
| (51) A61K 31/405                     | (87) GB2018053590                 | A61P 35/02                                     |
| A61K 31/4164                         | 20.06.2019                        | (11) EP3615027                                 |
| A61K 31/4245                         | (22) 11.12.2018                   | (21) EP18723602.1                              |
| A61K 31/43                           | (54) USE OF 3-[5-AMINO-4-(3-      | (47) 14.07.2021                                |
| A61K 31/443                          | CYANOBENZOYL)-PYRAZOL-1-          | (87) IB2018052710                              |
| A61K 31/47                           | YL]-N-CYCLOPROPYL-4-              | 01.11.2018                                     |
| A61K 31/496                          | METHYLBENZAMIDE IN THE            | (22) 19.04.2018                                |
| A61K 31/4965                         | TREATMENT OF ACUTE                | (54) METHODS OF USE FOR                        |
| A61K 31/7036                         | EXACERBATIONS OF CHRONIC          | TRISUBSTITUTED BENZOTRIAZOLE                   |
| A61K 31/734                          | OBSTRUCTIVE PULMONARY DISEASE     | DERIVATIVES AS DIHYDROOROTATE                  |
| A61K 45/06                           | (73) Mereo BioPharma 1 Limited    | OXYGENASE INHIBITORS                           |
| A61P 11/00                           | (72) MACKINNON, Alastair          | (73) Aurigene Discovery Technologies Limited   |
| (11) EP3273995                       | PARKIN, Jacqueline                | (72) NELLORE, Kavitha                          |
| (21) EP16711320.8                    | (31) 201720622                    | HOSAHALLI, Subramanya                          |
| (47) 14.07.2021                      | 201802354                         | (31) 201715494820                              |
| (87) EP2016056458                    | (32) 11.12.2017                   | 201815899707                                   |
| 29.09.2016                           | 13.02.2018                        | (32) 24.04.2017                                |
| (22) 23.03.2016                      | (33) United Kingdom               | 20.02.2018                                     |
| (54) COMBINED USE OF ALGINATE        | United Kingdom                    | (33) United States of America                  |
| OLIGOMERS AND THE CFTR               | (51) A61K 31/4184                 | United States of America                       |
| MODULATOR LUMACAFOR IN               | A61P 29/00                        | (51) A61K 31/4196                              |
| THE TREATMENT OF CONDITIONS          | A61P 35/00                        | A61K 31/435                                    |
| ASSOCIATED WITH CFTR                 | C07D 403/04                       | A61K 31/445                                    |
| DYSFUNCTION                          | C07D 413/04                       | C07D 249/08                                    |
| (73) ALGIPHARMA AS                   | C07D 413/14                       | C07D 401/02                                    |
| (72) DESSEN, Arne                    | C07D 417/04                       | C07D 401/04                                    |
| MYRSET, Astrid Hilde                 | C07D 487/08                       | (11) EP3558306                                 |
| RYE, Philip                          | C07D 491/08                       | (21) EP17883963.5                              |
| (31) 201504878                       | (11) EP3350177                    | (47) 07.07.2021                                |
| (32) 23.03.2015                      | (21) EP16778936.1                 | (87) US2017066921                              |
| (33) United Kingdom                  | (47) 07.07.2021                   | 28.06.2018                                     |
| (51) A61K 31/407                     | (87) US2016052104                 | (22) 18.12.2017                                |
| A61K 31/4709                         | 23.03.2017                        | (54) 6,5-FUSED HETEROARYL PIPERIDINE           |
| A61K 31/496                          | (22) 16.09.2016                   | ETHER ALLOSTERIC MODULATORS                    |
| A61K 31/7036                         | (54) HETEROARYL COMPOUNDS AS IRAK | OF THE M4 MUSCARINIC                           |
| A61K 38/43                           | INHIBITORS AND USES THEREOF       | ACETYLCHOLINE RECEPTOR                         |
| A61K 38/46                           | (73) Merck Patent GmbH            | (73) Merck Sharp & Dohme Corp.                 |
| A61K 38/47                           | (72) JORAND-LEBRUN, Catherine     | (72) GAO, Xiaolei                              |
| A61K 45/06                           | LAN, Ruoxi                        | KNOWLES, Sandra, L.                            |
| A61L 27/54                           | CHEN, Austin                      | LI, Chunsing                                   |
| A61L 29/16                           | CLARK, Ryan C.                    | LO, Michael Man-Chu                            |
| A61L 31/16                           | (31) 201562220307 P               | MAZZOLA, Robert, D., Jr.                       |
| A61P 31/04                           | (32) 18.09.2015                   | ONDEYKA, Debra, L.                             |
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| (21) EP17731822.7                    | (51) A61K 31/4184                 | (32) 22.12.2016                                |
| (47) 07.07.2021                      | A61P 35/02                        | (33) World Intellectual Property Office (WIPO) |
| (87) EP2017063533                    | C07D 235/14                       | (51) A61K 31/4196                              |
| 14.12.2017                           | (11) EP3452035                    | A61K 31/4439                                   |
| (22) 02.06.2017                      | (21) EP17793075.7                 | C07D 401/06                                    |

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(21) EP17870877.2  
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(87) US2017062132  
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(54) 4-((6-(2-(2,4-DIFLUOROPHENYL)-1,1-DIFLUORO-2-HYDROXY-3-(5-MERCAPTO-1H-1,2,4-TRIAZOL-1-YL)PROPYL)PYRIDIN-3-YL)OXY)BENZONITRILE AND PROCESSES OF PREPARATION  
(73) Dow AgroSciences LLC  
(72) GRAY, Kaitlyn  
YANG, Qiang  
BABIJ, Nicholas, R.  
(31) 201662423876 P  
(32) 18.11.2016  
(33) United States of America  
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(87) CN2018116351  
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(22) 20.11.2018  
(54) CRYSTAL FORMS OF A URAT1 INHIBITOR, AND PREPARATION METHODS THEREFOR  
(73) Medshine Discovery Inc.  
(72) WANG, Jianfei  
ZHANG, Yang  
ZHU, Wenyan  
LI, Jian  
CHEN, Shuhui  
(31) 201711181960  
(32) 23.11.2017  
(33) China  
(51) A61K 31/4245  
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| SECHI, Gianluca                                                                                                                               | (73) The Chinese University Of Hong Kong                                                                       | FRYKSTRAND ÅNGSTRÖM, Sara                                                              |
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| (72) ZUBER, Gerard                                                                                                                            | (72) CHEN, Rongliang                                                                                           | Taoda, Yoshiyuki                                                                       |
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| (72) WRIGHT, Dennis                                                                                            | 22.11.2018                                                                   | Lianyungang Runzhong Pharmaceutical<br>Co., Ltd.             |
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| KESHIPEDDY, Santosh                                                                                            | (73) Idorsia Pharmaceuticals Ltd                                             | WANG, Shulong                                                |
| REEVE, Stephanie                                                                                               | (72) BOSS, Christoph                                                         | LIU, Xijie                                                   |
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| (54) MEDICAL USES COMPRISING<br>METHODS FOR MEASUREMENT OF<br>INHIBITION OF C-JUN N-TERMINAL<br>KINASE IN SKIN | A61P 19/00                                                                   | (11) EP3589630                                               |
| (73) Signal Pharmaceuticals, LLC                                                                               | A61P 35/00                                                                   | (21) EP18712322.9                                            |
| (72) HORAN, Gerald Scott Barden                                                                                | A61P 35/02                                                                   | (47) 07.07.2021                                              |
| YE, Ying                                                                                                       | C07D 239/94                                                                  | (87) US2018020515                                            |
| (31) 201462092531 P                                                                                            | C07D 487/04                                                                  | 07.09.2018                                                   |
| (32) 16.12.2014                                                                                                | (11) EP3536687                                                               | (22) 01.03.2018                                              |
| (33) United States of America                                                                                  | (21) EP19170210.9                                                            | (54) CYCLIC SULFAMIDE COMPOUNDS<br>AND METHODS OF USING SAME |
| (51) A61K 31/506                                                                                               | (47) 14.07.2021                                                              | (73) Assembly Biosciences, Inc.                              |
| A61K 31/53                                                                                                     | (22) 28.11.2008                                                              | (72) TURNER, William, W., Jr.                                |
| A61P 31/14                                                                                                     | (54) SMALL MOLECULE MYRISTATE<br>INHIBITORS OF BCR-ABL AND<br>METHODS OF USE | LI, Leping                                                   |
| C07D 403/04                                                                                                    | (73) Dana Farber Cancer Institute, Inc.                                      | HAYDAR, Simon, Nicolas                                       |
| C07D 487/04                                                                                                    | The Scripps Research Institute                                               | BURES, Mark, G.                                              |
| (11) EP3380467                                                                                                 | (72) GRAY, Nathanael S.                                                      | RAI, Roopa                                                   |
| (21) EP16801246.6                                                                                              | ZHANG, Jianming                                                              | FRANCIS, Samson                                              |
| (47) 07.07.2021                                                                                                | OKRAM, Barun                                                                 | ARNOLD, Lee, Daniel                                          |
| (87) EP2016078778                                                                                              | (31) 4462 P                                                                  | (31) 201762465986 P                                          |
| 01.06.2017                                                                                                     | (32) 28.11.2007                                                              | 201762529874 P                                               |
| (22) 25.11.2016                                                                                                | (33) United States of America                                                | 201762549728 P                                               |
| (54) HETEROCYCLIC INDOLES FOR USE<br>IN INFLUENZA VIRUS INFECTION                                              | (51) A61K 31/519                                                             | (32) 02.03.2017                                              |
| (73) Janssen Sciences Ireland Unlimited<br>Company                                                             | A61P 35/00                                                                   | 07.07.2017                                                   |
| (72) JONCKERS, Tim Hugo Maria                                                                                  | C07D 487/14                                                                  | 24.08.2017                                                   |
| MC GOWAN, David Craig                                                                                          | C07D 487/20                                                                  | (33) United States of America                                |
| GUILLEMONT, Jérôme Émile Georges                                                                               | C07D 519/00                                                                  | United States of America                                     |
| COOYMANS, Ludwig Paul                                                                                          | (11) EP3567042                                                               | United States of America                                     |
| EMBRECHTS, Werner Constant Johan                                                                               | (21) EP19164126.5                                                            | (51) A61K 31/55                                              |
| BUYCK, Christophe Francis Robert                                                                               | (47) 07.07.2021                                                              | A61P 25/08                                                   |
| Nestor                                                                                                         | (22) 25.10.2011                                                              | C07D 405/04                                                  |
| BALEMANS, Wendy Mia Albert                                                                                     | (54) CDK INHIBITORS                                                          | C07D 413/04                                                  |
| RABOISSON, Pierre Jean-Marie Bernard                                                                           | (73) G1 Therapeutics, Inc.                                                   | C07D 417/04                                                  |
| (31) 15196811                                                                                                  | (72) TAVARES, Francis, X.                                                    | (11) EP3661929                                               |
| (32) 27.11.2015                                                                                                | STRUM, Jay C.                                                                | (21) EP18756100.6                                            |
| (33) European Patent Office (EPO)                                                                              | (31) 40649810 P                                                              | (47) 14.07.2021                                              |
| (51) A61K 31/506                                                                                               | (32) 25.10.2010                                                              | (87) US2018044854                                            |
| A61P 35/00                                                                                                     | (33) United States of America                                                | 07.02.2019                                                   |
| C07D 405/12                                                                                                    | (51) A61K 31/53                                                              | (22) 01.08.2018                                              |
|                                                                                                                | A61P 35/00                                                                   | (54) ISOCHROMAN COMPOUNDS AND<br>USES THEREOF                |
|                                                                                                                | C07D 251/18                                                                  | (73) Sunovion Pharmaceuticals Inc.                           |
|                                                                                                                | C07D 251/26                                                                  |                                                              |
|                                                                                                                | (11) EP3330258                                                               |                                                              |

|                                         |                                         |                                 |
|-----------------------------------------|-----------------------------------------|---------------------------------|
| PGI Drug Discovery LLC                  | C07F 1/12                               | A61K 38/21                      |
| (72) BOWEN, Carrie, A.                  | A61K 47/55                              | A61K 39/00                      |
| BURDI, Douglas, F.                      | (11) EP3564246                          | A61K 45/06                      |
| HEFFERNAN, Michele, L., R.              | (21) EP18382305.3                       | (11) EP3270953                  |
| HERMAN, Lee, W.                         | (47) 07.07.2021                         | (21) EP16710978.4               |
| XIE, Linghong                           | (22) 03.05.2018                         | (47) 07.07.2021                 |
| (31) 201762540249 P                     | (54) A GOLD(III) COMPLEX, A CONJUGATE   | (87) EP2016056050               |
| (32) 02.08.2017                         | OF THE GOLD(III) COMPLEX, A             | 22.09.2016                      |
| (33) United States of America           | PHARMACEUTICAL COMPOSITION              | (22) 18.03.2016                 |
| (51) A61K 31/5585                       | COMPRISING THE GOLD(III)                | (54) NOVEL TREATMENT METHOD     |
| A61K 38/28                              | COMPLEX AND USES AND A                  | (73) Idogen AB                  |
| A61P 3/10                               | PROCESS FOR PREPARING THE               | (72) ERICSSON, Peter            |
| (11) EP3536380                          | GOLD(III) COMPLEX                       | HEDBYS, Lars                    |
| (21) EP19161129.2                       | (73) Universidad de Almeria             | SALFORD, Leif                   |
| (47) 07.07.2021                         | Fundación Privada Instituto De Salud    | SJÖGREN, Hans-Olov              |
| (22) 04.05.2015                         | Global Barcelona                        | (31) 201504701                  |
| (54) RAPID-ACTING INSULIN               | (72) SOTO GONZÁLEZ, Sara María          | (32) 19.03.2015                 |
| COMPOSITIONS                            | RATIA LONCÁN, Carlos                    | (33) United Kingdom             |
| (73) ELI LILLY AND CO.                  | CEPAS LÓPEZ, Virginio                   | (51) A61K 31/7088               |
| (72) Christe, Michael Edward            | LÓPEZ CUBILLOS, Yuly                    | A61K 31/7105                    |
| Hardy, Thomas Andrew                    | LÓPEZ ORTIZ, Fernando                   | A61K 31/713                     |
| (31) 201461990402 P                     | IGLESIAS VALDÉS-SOLÍS, María José       | A61K 45/00                      |
| (32) 08.05.2014                         | GONZÁLEZ SOENGAS, Raquel María          | A61K 48/00                      |
| (33) United States of America           | (51) A61K 31/70                         | A61P 35/00                      |
| (51) A61K 31/56                         | A61P 17/02                              | A61P 35/02                      |
| A61P 31/04                              | (11) EP3624807                          | C12N 15/113                     |
| A61P 31/10                              | (21) EP18723038.8                       | (11) EP3372233                  |
| A61P 31/12                              | (47) 07.07.2021                         | (21) EP16862159.7               |
| A61P 33/00                              | (87) EP2018062811                       | (47) 07.07.2021                 |
| C07J 41/00                              | 22.11.2018                              | (87) JP2016082670               |
| (11) EP2625190                          | (22) 16.05.2018                         | 11.05.2017                      |
| (21) EP11819158.4                       | (54) USE OF OLIGOSACCHARIDE             | (22) 02.11.2016                 |
| (47) 14.07.2021                         | COMPOUNDS FOR TREATING                  | (54) PHARMACEUTICAL COMPOSITION |
| (87) DE2011001829                       | WOUNDS OF ARTERIOPATHIC                 | FOR TREATING AND/OR PREVENTING  |
| 26.04.2012                              | DIABETIC PATIENTS                       | CANCER                          |
| (22) 06.10.2011                         | (73) Urgo Recherche Innovation et       | (73) Toray Industries, Inc.     |
| (54) DERIVATIVES OF STEROID             | Développement                           | (72) MIYANO, Atsuko             |
| BENZYLAMINES, HAVING AN                 | (72) BOHBOT, Serge                      | SUDO, Hiroko                    |
| ANTIPARASITIC, ANTIBACTERIAL,           | (31) 1754363                            | TAKAYAMA, Aiko                  |
| ANTIMYCOTIC AND/OR ANTIVIRAL            | 1755620                                 | ARAI, Taiga                     |
| ACTION                                  | (32) 17.05.2017                         | (31) 2015218358                 |
| (73) Justus-Liebig- Universität Giessen | 20.06.2017                              | (32) 06.11.2015                 |
| (72) BECKER, Katja                      | (33) France                             | (33) Japan                      |
| KRIEG, Reimar                           | France                                  | (51) A61K 31/7105               |
| SCHÖNECKER, Bruno                       | (51) A61K 31/7048                       | A61K 31/711                     |
| (31) 102010047714                       | A61K 36/40                              | A61K 48/00                      |
| (32) 06.10.2010                         | A61P 19/04                              | A61P 35/00                      |
| (33) Germany                            | A61P 25/00                              | (11) EP3498284                  |
| (51) A61K 31/575                        | A61P 37/02                              | (21) EP17839518.2               |
| A61P 29/00                              | (11) EP2581087                          | (47) 14.07.2021                 |
| (11) EP2970280                          | (21) EP10852671.6                       | (87) JP2017028866               |
| (21) EP14769640.5                       | (47) 07.07.2021                         | 15.02.2018                      |
| (47) 07.07.2021                         | (87) CN2010002049                       | (22) 09.08.2017                 |
| (87) US2014025671                       | 15.12.2011                              | (54) PHARMACEUTICAL COMPOSITION |
| 25.09.2014                              | (22) 15.12.2010                         | FOR TREATING AND/OR PREVENTING  |
| (22) 13.03.2014                         | (54) COMPOSITION CONTAINING IRIDOIDS    | CANCER                          |
| (54) METHODS FOR TREATING               | AND USES THEREOF                        | (73) Toray Industries, Inc.     |
| INFLAMMATION, AUTOIMMUNE                | (73) Xuanwu Hospital of Capital Medical | (72) MIYANO, Atsuko             |
| DISORDERS AND PAIN                      | University                              | TAKAYAMA, Aiko                  |
| (73) Brigham Young University           | (72) LI, Lin                            | SUDO, Hiroko                    |
| (72) SAVAGE, Paul B.                    | YIN, Linlin                             | ARAI, Taiga                     |
| GENBERG, Carl                           | ZHANG, Lan                              | (31) 2016156375                 |
| (31) 201361794721 P                     | WANG, Wen                               | (32) 09.08.2016                 |
| (32) 15.03.2013                         | ZHANG, Ruyi                             | (33) Japan                      |
| (33) United States of America           | (31) 201010198166                       | (51) A61K 31/711                |
| (51) A61K 31/67                         | (32) 11.06.2010                         | A61K 38/21                      |
| A61K 45/06                              | (33) China                              | A61P 35/00                      |
| A61P 31/04                              | (51) A61K 31/7068                       | C07K 16/28                      |

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|--------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| C07K 16/30                                                                                             | (22) 21.12.2016                                                                                                                           | (33) United States of America                                                  |
| C12N 5/00                                                                                              | (54) MEDICINAL COMPOSITION FOR IMPROVING PROGNOSIS AFTER RESTART OF PATIENT'S OWN HEARTBEAT                                               | (51) A61K 36/81                                                                |
| (11) EP3370733                                                                                         |                                                                                                                                           | A61P 3/10                                                                      |
| (21) EP16862825.3                                                                                      |                                                                                                                                           | A61P 37/04                                                                     |
| (47) 14.07.2021                                                                                        |                                                                                                                                           | (11) EP3364990                                                                 |
| (87) US2016059996                                                                                      | (73) Keio University                                                                                                                      | (21) EP16857057.0                                                              |
| 11.05.2017                                                                                             | Taiyo Nippon Sanso Corporation                                                                                                            | (47) 14.07.2021                                                                |
| (22) 02.11.2016                                                                                        | (72) SUZUKI, Masaru                                                                                                                       | (87) IN2016050354                                                              |
| (54) METHODS OF CD40 ACTIVATION AND IMMUNE CHECKPOINT BLOCKADE                                         | HAYASHIDA, Kei                                                                                                                            | 27.04.2017                                                                     |
| (73) Board of Regents, The University of Texas System                                                  | TAMURA, Tomoyoshi                                                                                                                         | (22) 18.10.2016                                                                |
| Memgen LLC                                                                                             | SANO, Motoaki                                                                                                                             | (54) A PROCESS TO ENHANCE THE BIOACTIVITY OF ASHWAGANDHA EXTRACTS              |
| (72) OVERWIJK, Willem, W.                                                                              | NISHIWAKI, Yoshiki                                                                                                                        | (73) Antony, Benny                                                             |
| SINGH, Manisha                                                                                         | (31) 2015257318                                                                                                                           | (72) Antony, Benny                                                             |
| HWU, Patrick                                                                                           | (32) 28.12.2015                                                                                                                           | (31) 5691CH2015                                                                |
| CANTWELL, Mark                                                                                         | (33) Japan                                                                                                                                | (32) 22.10.2015                                                                |
| (31) 201562249725 P                                                                                    | (51) A61K 35/00                                                                                                                           | (33) India                                                                     |
| (32) 02.11.2015                                                                                        | C12N 1/20                                                                                                                                 |                                                                                |
| (33) United States of America                                                                          | C12R 1/225                                                                                                                                | (51) A61K 38/00                                                                |
| (51) A61K 31/728                                                                                       | C12R 1/25                                                                                                                                 | A61K 38/17                                                                     |
| A61K 38/16                                                                                             | (11) EP3494206                                                                                                                            | A61K 38/22                                                                     |
| A61P 27/02                                                                                             | (21) EP17758960.3                                                                                                                         | A61K 38/27                                                                     |
| (11) EP3300482                                                                                         | (47) 07.07.2021                                                                                                                           | A61K 38/29                                                                     |
| (21) EP16797292.6                                                                                      | (87) IB2017054734                                                                                                                         | A61P 19/08                                                                     |
| (47) 14.07.2021                                                                                        | 08.02.2018                                                                                                                                | A61P 19/10                                                                     |
| (87) US2016033248                                                                                      | (22) 02.08.2017                                                                                                                           | (11) EP3308796                                                                 |
| 24.11.2016                                                                                             | (54) LACTIC BACTERIA AND THE USE THEREOF FOR THE PREVENTIVE, INHIBITORY AND/OR REDUCTIVE TREATMENT OF THE FORMATION OF BACTERIAL BIOFILMS | (21) EP17190589.6                                                              |
| (22) 19.05.2016                                                                                        |                                                                                                                                           | (47) 14.07.2021                                                                |
| (54) USE OF PRG4 TO IMPROVE DYNAMIC VISUAL ACUITY AND HIGHER ORDER ABERRATIONS                         | (73) Probiotal S.p.a.                                                                                                                     | (22) 01.11.2013                                                                |
| (73) Lubris LLC                                                                                        | CRK S.R.L.                                                                                                                                | (54) ACTIVIN-ACTRII ANTAGONISTS AND USES FOR TREATING BONE AND OTHER DISORDERS |
| (72) SULLIVAN, Benjamin, D.                                                                            | (72) MOGNA, Giovanni                                                                                                                      | (73) Celgene Corporation                                                       |
| TRUITT, Edward, R.                                                                                     | (31) 201600081420                                                                                                                         | Washington University                                                          |
| (31) 201562163753 P                                                                                    | (32) 03.08.2016                                                                                                                           | (72) Schorr Sloan, Victor                                                      |
| (32) 19.05.2015                                                                                        | (33) Italy                                                                                                                                | Hruska, Keith                                                                  |
| (33) United States of America                                                                          | (51) A61K 36/00                                                                                                                           | Fang, Yifu                                                                     |
| (51) A61K 31/734                                                                                       | (11) EP3505175                                                                                                                            | Sung, Victoria                                                                 |
| G01N 21/35                                                                                             | (21) EP18204430.5                                                                                                                         | Stevens, Randall                                                               |
| G01N 21/359                                                                                            | (47) 14.07.2021                                                                                                                           | Smith, William                                                                 |
| G01N 21/552                                                                                            | (22) 28.08.2012                                                                                                                           | (31) 201261721898 P                                                            |
| (11) EP3580549                                                                                         | (54) GLUCOSYL STEVIA COMPOSITION                                                                                                          | 201261740665 P                                                                 |
| (21) EP18708910.7                                                                                      | (73) PureCircle USA Inc.                                                                                                                  | (32) 02.11.2012                                                                |
| (47) 14.07.2021                                                                                        | (72) MARKOSYAN, Avetik                                                                                                                    | 21.12.2012                                                                     |
| (87) EP2018053347                                                                                      | (31) 201161548818 P                                                                                                                       | (33) United States of America                                                  |
| 16.08.2018                                                                                             | 201161580274 P                                                                                                                            | United States of America                                                       |
| (22) 09.02.2018                                                                                        | 201213567707                                                                                                                              |                                                                                |
| (54) A COMPANION DIAGNOSTIC METHOD FOR USE IN THE TREATMENT OF CYSTIC FIBROSIS WITH ALGINATE OLIGOMERS | (32) 19.10.2011                                                                                                                           | (51) A61K 38/00                                                                |
| (73) Algipharm AS                                                                                      | 26.12.2011                                                                                                                                | A61K 38/17                                                                     |
| (72) LEWIS, Paul                                                                                       | 06.08.2012                                                                                                                                | A61P 35/00                                                                     |
| DESSEN, Arne                                                                                           | (33) United States of America                                                                                                             | C07K 7/08                                                                      |
| RYE, Philip                                                                                            | United States of America                                                                                                                  | C07K 14/435                                                                    |
| (31) 201702161                                                                                         | United States of America                                                                                                                  | C07K 14/475                                                                    |
| (32) 09.02.2017                                                                                        |                                                                                                                                           | C07K 19/00                                                                     |
| (33) United Kingdom                                                                                    | (51) A61K 36/64                                                                                                                           | (11) EP3366695                                                                 |
| (51) A61K 33/00                                                                                        | A61P 21/00                                                                                                                                | (21) EP18153550.1                                                              |
| A61P 9/10                                                                                              | (11) EP3403664                                                                                                                            | (47) 07.07.2021                                                                |
| A61P 25/28                                                                                             | (21) EP17738147.2                                                                                                                         | (22) 17.12.2010                                                                |
| A61P 39/06                                                                                             | (47) 07.07.2021                                                                                                                           | (54) SAPOSIN-A DERIVED PEPTIDES AND USES THEREOF                               |
| (11) EP3398605                                                                                         | (87) CN2017070862                                                                                                                         | (73) Children's Medical Center Corporation                                     |
| (21) EP16881680.9                                                                                      | 20.07.2017                                                                                                                                | (72) Randolph, WATNICK                                                         |
| (47) 14.07.2021                                                                                        | (22) 11.01.2017                                                                                                                           | (31) 640788                                                                    |
| (87) JP2016088172                                                                                      | (54) USE OF CISTANCHE TUBULOSA                                                                                                            | (32) 17.12.2009                                                                |
| 06.07.2017                                                                                             | (73) Sinphar Tian-li Pharmaceutical Co., Ltd. (Hangzhou)                                                                                  | (33) United States of America                                                  |
|                                                                                                        | (72) WANG, Chao-jih                                                                                                                       |                                                                                |
|                                                                                                        | YEH, Ai-ling                                                                                                                              | (51) A61K 38/10                                                                |
|                                                                                                        | (31) 201662277795 P                                                                                                                       | A61P 9/00                                                                      |
|                                                                                                        | (32) 12.01.2016                                                                                                                           | C07K 1/00                                                                      |
|                                                                                                        |                                                                                                                                           | C07K 7/08                                                                      |

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|----------------------------------------------|------------------------------------------|-----------------------------------|
| C12N 5/10                                    | (47) 14.07.2021                          | C07K 16/18                        |
| C12N 15/12                                   | (87) CN2015086173                        | C12N 15/62                        |
| C12N 15/63                                   | 09.02.2017                               | A61K 47/66                        |
| (11) EP3239168                               | (22) 05.08.2015                          | (11) EP3538547                    |
| (21) EP14908843.7                            | (54) MULTI-TARGET COMPOUND               | (21) EP17801386.8                 |
| (47) 14.07.2021                              | WITH ANTICOAGULATION                     | (47) 07.07.2021                   |
| (87) CN2014095196                            | AND ANTIPLATELET ACTIVITY,               | (87) EP2017078652                 |
| 30.06.2016                                   | PREPARATION METHOD THEREFOR,             | 17.05.2018                        |
| (22) 26.12.2014                              | AND USE THEREOF                          | (22) 08.11.2017                   |
| (54) DERIVATIVE OF CONOTOXIN PEPTIDE         | (73) Shaanxi Micot Technology Limited    | (54) IMMUNOCONJUGATES COMPRISING  |
| KAPPA-CPTX-BTL02, PREPARATION                | Company                                  | IL-2, ANTI-FIBRONECTIN ANTIBODY   |
| METHOD THEREFOR, AND USES                    | (72) DING, Wei                           | AND MUTANT TNF-ALPHA              |
| THEREOF                                      | FAN, Qiangwei                            | (73) Philogen S.p.A.              |
| (73) BGI Shenzhen                            | YIN, Bo                                  | (72) NERI, Dario                  |
| (72) LIU, Jie                                | FU, Guoqin                               | DE LUCA, Roberto                  |
| LIN, Zhilong                                 | (51) A61K 38/17                          | WULHFARD, Sarah                   |
| WEN, Bo                                      | A61K 39/00                               | (31) 201618888                    |
| TONG, Ting                                   | A61P 35/00                               | 201712916                         |
| MO, Fen                                      | A61P 37/04                               | (32) 09.11.2016                   |
| PENG, Chao                                   | C07K 7/06                                | 11.08.2017                        |
| SHI, Qiong                                   | C12N 15/09                               | (33) United Kingdom               |
| (51) A61K 38/10                              | C12N 5/0784                              | United Kingdom                    |
| A61P 19/02                                   | A61K 47/50                               | (51) A61K 38/22                   |
| A61P 27/02                                   | (11) EP3205661                           | A61P 25/28                        |
| A61P 29/00                                   | (21) EP15849707.3                        | (11) EP3423081                    |
| A61P 35/00                                   | (47) 07.07.2021                          | (21) EP17707869.8                 |
| C07K 7/08                                    | (87) JP2015078504                        | (47) 14.07.2021                   |
| A61K 47/60                                   | 14.04.2016                               | (87) EP2017054665                 |
| (11) EP3453716                               | (22) 07.10.2015                          | 08.09.2017                        |
| (21) EP17778569.8                            | (54) HSP70-DERIVED IMMUNITY INDUCING     | (22) 28.02.2017                   |
| (47) 14.07.2021                              | PEPTIDE                                  | (54) COMPOSITIONS FOR USE IN THE  |
| (87) CN2017075864                            | (73) CYTLIMIC INC.                       | TREATMENT OF NEUROLOGICAL         |
| 12.10.2017                                   | (72) MIYAKAWA, Tomoya                    | DISEASE                           |
| (22) 07.03.2017                              | OKA, Masaaki                             | (73) University Of Ulster         |
| (54) POLYETHYLENE GLYCOL-MODIFIED            | HAZAMA, Shoichi                          | (72) MCCLEAN, Paula               |
| ANGIOGENESIS INHIBITOR HM-1 AND              | TAMADA, Koji                             | (31) 201603510                    |
| APPLICATION THEREOF                          | UDAKA, Keiko                             | (32) 29.02.2016                   |
| (73) Nanjing Anji Biological Technology Co., | (31) 2014206730                          | (33) United Kingdom               |
| Ltd                                          | (32) 07.10.2014                          | (51) A61K 38/36                   |
| (72) XU, Hanmei                              | (33) Japan                               | A61K 38/48                        |
| (31) 201610211000                            | (51) A61K 38/17                          | A61L 24/00                        |
| (32) 06.04.2016                              | A61P 3/10                                | A61L 24/04                        |
| (33) China                                   | (11) EP3297654                           | A61L 26/00                        |
| (51) A61K 38/16                              | (21) EP16800621.1                        | A61P 7/04                         |
| A61K 38/17                                   | (47) 07.07.2021                          | A61P 41/00                        |
| A61P 35/00                                   | (87) US2016033837                        | (11) EP2851095                    |
| (11) EP3552617                               | 01.12.2016                               | (21) EP13791531.0                 |
| (21) EP19174352.5                            | (22) 23.05.2016                          | (47) 14.07.2021                   |
| (47) 07.07.2021                              | (54) TREATMENT OF POST-BARIATRIC         | (87) JP2013063872                 |
| (22) 29.10.2010                              | HYPOGLYCEMIA WITH EXENDIN(9-39)          | 21.11.2013                        |
| (54) DRUG RESISTANT IMMUNOTHERAPY            | (73) The Board of Trustees of the Leland | (22) 13.05.2013                   |
| FOR TREATMENT OF A CANCER                    | Stanford Junior University               | (54) SHEET MOLDING AND HEMOSTATIC |
| (73) Emory University                        | (72) MCLAUGHLIN, Tracey L.               | MATERIAL                          |
| The UAB Research Foundation                  | CRAIG, Colleen M.                        | (73) Teijin Limited               |
| Children's Healthcare Of Atlanta, Inc.       | (31) 201562165743 P                      | Teijin Pharma Limited             |
| (72) SPENCER, H. Trent                       | 201562254175 P                           | KM Biologics Co., Ltd.            |
| DASGUPTA, Anindya                            | 201662329850 P                           | (72) KAGEYAMA, Yukako             |
| LAMB, Lawrence S.                            | (32) 22.05.2015                          | FUJINAGA, Kentaro                 |
| (31) 25713609 P                              | 11.11.2015                               | YAMAGUCHI, Ayuko                  |
| (32) 02.11.2009                              | 29.04.2016                               | AKIYAMA, Yusuke                   |
| (33) United States of America                | (33) United States of America            | OONO, Akitoshi                    |
| (51) A61K 38/16                              | United States of America                 | HONDA, Susumu                     |
| A61P 7/02                                    | United States of America                 | SATAKE, Makoto                    |
| A61P 9/10                                    | (51) A61K 38/19                          | KANEKO, Hiroaki                   |
| C07K 9/00                                    | A61K 38/20                               | IMAMURA, Takayuki                 |
| C07K 14/00                                   | A61P 35/00                               | KAWAMURA, Ryoichi                 |
| (11) EP3333177                               | C07K 14/525                              | HIRASHIMA, Masaki                 |
| (21) EP15900056.1                            | C07K 14/55                               | (31) 2012110392                   |

|                                         |                                      |                                       |
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| 2012110393                              | Phoenix Nest Inc.                    | KIM, Jin-Hwan                         |
| 2012110394                              | (72) DICKSON, Patricia               | PRASAD, Avvari Krishna                |
| 2012110391                              | CHOU, Tsui-Fen                       | YANG, Yu-Ying                         |
| 2013003273                              | EKINS, Sean                          | (31) 201461929598 P                   |
| (32) 14.05.2012                         | KAN, Shih-Hsin                       | (32) 21.01.2014                       |
| 14.05.2012                              | LE, Steven                           | (33) United States of America         |
| 14.05.2012                              | MOEN, Derek R.                       | (51) A61K 39/00                       |
| 14.05.2012                              | (31) 201762611472 P                  | A61K 39/09                            |
| 11.01.2013                              | 201815946505                         | A61K 39/385                           |
| (33) Japan                              | (32) 28.12.2017                      | A61K 39/39                            |
| Japan                                   | 05.04.2018                           | A61P 11/00                            |
| Japan                                   | (33) United States of America        | A61P 31/04                            |
| Japan                                   | United States of America             | (11) EP3096786                        |
| Japan                                   | (51) A61K 38/48                      | (21) EP15708581.2                     |
| (51) A61K 38/45                         | A61P 17/02                           | (47) 07.07.2021                       |
| A61P 43/00                              | (11) EP3137102                       | (87) IB2015050316                     |
| C12Q 1/6809                             | (21) EP14889425.6                    | 30.07.2015                            |
| C12Q 1/6869                             | (47) 14.07.2021                      | (22) 15.01.2015                       |
| C12Q 1/6886                             | (87) AU2014050323                    | (54) STREPTOCOCCUS PNEUMONIAE         |
| G16H 15/00                              | 22.10.2015                           | CAPSULAR POLYSACCHARIDES AND          |
| (11) EP3110975                          | (22) 29.10.2014                      | CONJUGATES THEREOF                    |
| (21) EP15754498.2                       | (54) APC FOR USE IN THE TREATMENT OF | (73) Pfizer Inc.                      |
| (47) 07.07.2021                         | ABNORMAL CUTANEOUS SCARRING          | (72) HAN, Mingming                    |
| (87) US2015018115                       | (73) ZZ Biotech LLC                  | PRASAD, Avvari Krishna                |
| 03.09.2015                              | (72) JACKSON, Christopher John       | COOPER, David                         |
| (22) 27.02.2015                         | XUE, Meilang                         | WATSON, Wendy Jo                      |
| (54) METHODS FOR ANALYSIS OF            | (31) 2014901397                      | (31) 201461929561 P                   |
| SOMATIC MOBILE ELEMENTS, AND            | (32) 16.04.2014                      | (32) 21.01.2014                       |
| USES THEREOF                            | (33) Australia                       | (33) United States of America         |
| (73) Jumpcode Genomics, Inc.            | (51) A61K 38/48                      | (51) A61K 39/00                       |
| (72) BROWN, Keith                       | A61P 17/02                           | A61K 39/12                            |
| (31) 201461945791 P                     | (11) EP3131572                       | C07K 14/01                            |
| (32) 27.02.2014                         | (21) EP15779573.3                    | C07K 14/555                           |
| (33) United States of America           | (47) 14.07.2021                      | C07K 14/56                            |
| (51) A61K 38/46                         | (87) AU2015050177                    | C07K 14/57                            |
| A61L 2/16                               | 22.10.2015                           | C12N 15/70                            |
| A01N 65/00                              | (22) 16.04.2015                      | (11) EP3399040                        |
| A01N 63/50                              | (54) APC ANALOGUE FOR USE IN WOUND   | (21) EP15911682.1                     |
| (11) EP3351264                          | HEALING                              | (47) 14.07.2021                       |
| (21) EP18160053.7                       | (73) ZZ Biotech LLC                  | (87) CN2015099172                     |
| (47) 14.07.2021                         | (72) XUE, Meilang                    | 06.07.2017                            |
| (22) 06.01.2010                         | JACKSON, Christopher John            | (22) 28.12.2015                       |
| (54) COMPOSITION COMPRISING             | (31) 2014901397                      | (54) METHOD OF PREPARING PORCINE      |
| PROTEASE, AMYLASE AND LIPASE            | 2014902900                           | CIRCOCIRUS TYPE 2 CAPSID              |
| (73) Galenagen, LLC                     | (32) 16.04.2014                      | PROTEIN AND PHARMACEUTICAL            |
| (72) FALLON, Joan M                     | 25.07.2014                           | COMPOSITION COMPRISING SAME           |
| HEIL, Matthew                           | (33) Australia                       | (73) Agricultural Technology Research |
| FALLON, James J                         | Australia                            | Institute                             |
| (31) 142714 P                           | (51) A61K 39/00                      | (72) LIN, Jiunn-Horng                 |
| 153274 P                                | A61K 39/02                           | CHEN, Zeng-Weng                       |
| 170915 P                                | A61K 39/09                           | WANG, Jyh-Perng                       |
| (32) 06.01.2009                         | A61K 39/385                          | PENG, Tzu-Ting                        |
| 17.02.2009                              | A61K 39/39                           | LEE, Huei-Yu                          |
| 20.04.2009                              | A61P 31/04                           | HUANG, Weng-Zeng                      |
| (33) United States of America           | A61P 37/04                           | WANG, Shih-Rong                       |
| United States of America                | A61P 43/00                           | YANG, Cheng-Yao                       |
| United States of America                | (11) EP3096783                       | (51) A61K 39/00                       |
| (51) A61K 38/46                         | (21) EP15708579.6                    | A61K 39/395                           |
| C12N 9/16                               | (47) 07.07.2021                      | A61P 35/00                            |
| (11) EP3505181                          | (87) IB2015050314                    | A61P 35/04                            |
| (21) EP18248241.4                       | 30.07.2015                           | A61P 37/00                            |
| (47) 07.07.2021                         | (22) 15.01.2015                      | A61P 43/00                            |
| (22) 28.12.2018                         | (54) STREPTOCOCCUS PNEUMONIAE        | C07K 16/28                            |
| (54) PREPARATION OF ENZYME              | CAPSULAR POLYSACCHARIDES AND         | C07K 16/32                            |
| REPLACEMENT THERAPY FOR                 | CONJUGATES THEREOF                   | C12N 15/00                            |
| MUCOPOLYSACCHARIDOSIS IIID              | (73) Pfizer Inc.                     | G01N 33/574                           |
| (73) Los Angeles Biomedical Research    | (72) GU, Jianxin                     | (11) EP3196213                        |
| Institute at Harbor-UCLA Medical Center | KAINTHAN, Rajesh Kumar               | (21) EP17154607.0                     |

|                                                                                           |                                                                                 |                                                                                    |
|-------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| (47) 14.07.2021                                                                           | (33) United States of America                                                   | CASTELLANOS MARTIN, Andres                                                         |
| (22) 29.12.2006                                                                           | United States of America                                                        | MARTIN PEÑA, Merce                                                                 |
| (54) ANTIBODIES DIRECTED TO HER-3<br>AND USES THEREOF                                     | United States of America                                                        | (31) 15382474                                                                      |
| (73) Daiichi Sankyo Europe GmbH                                                           | United States of America                                                        | (32) 29.09.2015                                                                    |
| Amgen Inc.                                                                                | (51) A61K 39/00                                                                 | (33) European Patent Office (EPO)                                                  |
| (72) ROTHE, Mike                                                                          | A61P 25/28                                                                      | (51) A61K 39/095                                                                   |
| TREDER, Martin                                                                            | C07K 16/18                                                                      | A61P 31/04                                                                         |
| HARTMANN, Susanne                                                                         | C12N 5/10                                                                       | A61P 37/00                                                                         |
| FREEMAN, Dan                                                                              | C12N 15/13                                                                      | A61P 37/02                                                                         |
| RADINSKY, Bob                                                                             | (11) EP3070100                                                                  | A61P 37/04                                                                         |
| BORGES, Eric                                                                              | (21) EP16161726.1                                                               | A61P 43/00                                                                         |
| (31) 755103 P                                                                             | (47) 07.07.2021                                                                 | A61K 47/61                                                                         |
| (32) 30.12.2005                                                                           | (22) 26.02.2001                                                                 | (11) EP2957300                                                                     |
| (33) United States of America                                                             | (54) HUMANIZED ANTIBODIES THAT<br>SEQUESTER AMYLOID BETA PEPTIDE                | (21) EP15167027.0                                                                  |
| (51) A61K 39/00                                                                           | (73) WASHINGTON UNIVERSITY ST. LOUIS                                            | (47) 14.07.2021                                                                    |
| A61K 39/395                                                                               | Eli Lilly & Company                                                             | (22) 22.01.2002                                                                    |
| A61P 35/00                                                                                | (72) HOLTZMAN, David M.                                                         | (54) MULTIVALENT MENINGOCOCCAL<br>POLYSACCHARIDE-PROTEIN<br>CONJUGATE VACCINE      |
| A61P 43/00                                                                                | DEMATTOS, Ronald                                                                | (73) Sanofi Pasteur Inc.                                                           |
| C07K 16/32                                                                                | BALES, Kelly R                                                                  | (72) Ryall, Robert                                                                 |
| C12P 21/00                                                                                | PAUL, Steven M.                                                                 | (31) 263435 P                                                                      |
| C12P 21/08                                                                                | TSURUSHITA, Naoya                                                               | (32) 23.01.2001                                                                    |
| A61K 47/68                                                                                | VASQUEZ, Maximiliano                                                            | (33) United States of America                                                      |
| (11) EP2935611                                                                            | (31) 184601 P                                                                   | (51) A61K 39/12                                                                    |
| (21) EP14790777.8                                                                         | 254465 P                                                                        | A61K 39/21                                                                         |
| (47) 07.07.2021                                                                           | 254498 P                                                                        | A61P 31/18                                                                         |
| (87) NL2014050717                                                                         | (32) 24.02.2000                                                                 | A61P 37/02                                                                         |
| 23.04.2015                                                                                | 08.12.2000                                                                      | A61P 37/04                                                                         |
| (22) 14.10.2014                                                                           | 08.12.2000                                                                      | C07K 14/195                                                                        |
| (54) GLYCOENGINEERED ANTIBODY,<br>ANTIBODY-CONJUGATE AND<br>METHODS FOR THEIR PREPARATION | (33) United States of America                                                   | C07K 16/28                                                                         |
| (73) SynAffix B.V.                                                                        | United States of America                                                        | C12N 15/62                                                                         |
| (72) VAN DELFT, Floris Louis                                                              | United States of America                                                        | A61K 47/64                                                                         |
| VAN GEEL, Remon                                                                           | (51) A61K 39/00                                                                 | A61K 47/68                                                                         |
| WIJDEVEN, Maria Antonia                                                                   | C07K 16/28                                                                      | (11) EP3388450                                                                     |
| (31) 13188585                                                                             | (11) EP3256165                                                                  | (21) EP18173658.8                                                                  |
| 14165581                                                                                  | (21) EP16749944.1                                                               | (47) 07.07.2021                                                                    |
| (32) 14.10.2013                                                                           | (47) 14.07.2021                                                                 | (22) 16.07.2009                                                                    |
| 23.04.2014                                                                                | (87) US2016017713                                                               | (54) HIV VACCINE BASED ON TARGETING<br>MAXIMIZED GAG AND NEF TO<br>DENDRITIC CELLS |
| (33) European Patent Office (EPO)                                                         | 18.08.2016                                                                      | (73) Baylor Research Institute                                                     |
| European Patent Office (EPO)                                                              | (22) 12.02.2016                                                                 | Institut National de la Santé et de la<br>Recherche Médicale                       |
| (51) A61K 39/00                                                                           | (54) ANTIBODY THERAPEUTICS THAT<br>BIND CTLA4                                   | (72) BANCHEREAU, Jacques F.                                                        |
| A61K 39/395                                                                               | (73) Sorrento Therapeutics, Inc.                                                | ZURAWSKI, Gerard                                                                   |
| C07K 16/28                                                                                | (72) GRAY, John, Dixon                                                          | FLAMAR, Anne-laure                                                                 |
| (11) EP3456346                                                                            | ZHOU, Heyue                                                                     | COBB, Amanda                                                                       |
| (21) EP18199685.1                                                                         | (31) 201562116353 P                                                             | MEAD, Holly                                                                        |
| (47) 07.07.2021                                                                           | (32) 13.02.2015                                                                 | MONTES, Monica                                                                     |
| (22) 28.07.2016                                                                           | (33) United States of America                                                   | (31) 81234 P                                                                       |
| (54) PD-1 AND LAG-3 BINDING<br>MOLECULES AND METHODS OF USE<br>THEREOF                    | (51) A61K 39/00                                                                 | (32) 16.07.2008                                                                    |
| (73) MacroGenics, Inc.                                                                    | C07K 16/28                                                                      | (33) United States of America                                                      |
| (72) SHAH, Kalpana                                                                        | C07K 16/30                                                                      | (51) A61K 39/12                                                                    |
| SMITH, Douglas, H.                                                                        | C12N 15/11                                                                      | C07K 14/005                                                                        |
| LA MOTTE-MOHS, Ross                                                                       | G01N 33/574                                                                     | (11) EP3522919                                                                     |
| JOHNSON, Leslie, S.                                                                       | (11) EP3356412                                                                  | (21) EP17804940.9                                                                  |
| MOORE, Paul, A.                                                                           | (21) EP16777649.1                                                               | (47) 07.07.2021                                                                    |
| BONVINI, Ezio                                                                             | (47) 07.07.2021                                                                 | (87) IB2017056147                                                                  |
| KOENIG, Scott                                                                             | (87) EP2016073208                                                               | 12.04.2018                                                                         |
| (31) 201562198867 P                                                                       | 06.04.2017                                                                      | (22) 05.10.2017                                                                    |
| 201562239559 P                                                                            | (22) 29.09.2016                                                                 | (54) VACCINE                                                                       |
| 201562255140 P                                                                            | (54) TARGETING METASTASIS STEM<br>CELLS THROUGH A FATTY ACID<br>RECEPTOR (CD36) | (73) GlaxoSmithKline Biologicals SA                                                |
| 201662322974 P                                                                            | (73) Fundació Institut de Recerca Biomèdica<br>(IRB Barcelona)                  | (72) GERARD, Catherine Marie Ghislaine                                             |
| (32) 30.07.2015                                                                           | Institució Catalana de Recerca i Estudis<br>Avançats                            | GIANNINI, Sandra                                                                   |
| 09.10.2015                                                                                | (72) AZNAR BENITAH, Salvador                                                    | MASSAUX, Julien Thierry                                                            |
| 13.11.2015                                                                                | PASCUAL ANGULO, Gloria                                                          | (31) 201616904                                                                     |
| 15.04.2016                                                                                |                                                                                 | (32) 05.10.2016                                                                    |



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| (33) United Kingdom                   | (31) 2015102142                      | CONNORS, Mark                            |
| (51) A61K 39/17                       | (32) 19.05.2015                      | MASCOLA, John, R.                        |
| A61P 35/00                            | (33) Japan                           | KOUP, Richard, A.                        |
| C07K 14/47                            | (51) A61K 39/395                     | HUANG, Jinghe                            |
| C12N 5/10                             | A61P 29/00                           | DORIA-ROSE, Nicole, A.                   |
| C12N 7/01                             | C07K 16/28                           | ZHOU, Tongqing                           |
| C12N 15/62                            | (11) EP3450458                       | KWONG, Peter, D.                         |
| C12N 15/63                            | (21) EP18200535.5                    | KWON, Young, Do                          |
| C12N 5/0783                           | (47) 14.07.2021                      | PEGU, Amarendra                          |
| A61K 35/17                            | (22) 21.08.2013                      | ASOKAN, Mangaiarkarasi                   |
| (11) EP3382009                        | (54) HUMAN ANTIBODIES TO GFRALPHA3   | (31) 201562246113 P                      |
| (21) EP16863554.8                     | AND METHODS OF USE THEREOF           | 16305211                                 |
| (47) 07.07.2021                       | (73) Regeneron Pharmaceuticals, Inc. | 201662322029 P                           |
| (87) CN2016103941                     | (72) CROLL, Susan, D.                | 201662331169 P                           |
| 18.05.2017                            | MACDONALD, Lynn                      | (32) 25.10.2015                          |
| (22) 31.10.2016                       | MURPHY, Andrew, J.                   | 24.02.2016                               |
| (54) CHIMERIC ANTIGEN RECEPTOR-       | (31) 201261692029 P                  | 13.04.2016                               |
| MODIFIED IMMUNE EFFECTOR CELL         | (32) 22.08.2012                      | 03.05.2016                               |
| CARRYING PD-L1 BLOCKING AGENT         | (33) United States of America        | (33) United States of America            |
| (73) Carsgen Therapeutics Ltd         | (51) A61K 39/395                     | European Patent Office (EPO)             |
| Shanghai Cancer Institute             | A61P 35/00                           | United States of America                 |
| (72) LI, Zonghai                      | C07K 16/00                           | United States of America                 |
| PAN, Zeyan                            | C12N 15/09                           | (51) A61K 41/00                          |
| SHI, Zhimin                           | (11) EP3050896                       | (11) EP3727448                           |
| SONG, Bo                              | (21) EP14847811.8                    | (21) EP18825693.7                        |
| WANG, Peng                            | (47) 07.07.2021                      | (47) 14.07.2021                          |
| (31) 201510779876                     | (87) JP2014075728                    | (87) EP2018086189                        |
| (32) 13.11.2015                       | 02.04.2015                           | 27.06.2019                               |
| (33) China                            | (22) 26.09.2014                      | (22) 20.12.2018                          |
| (51) A61K 39/395                      | (54) METHOD FOR PRODUCING            | (54) METHOD FOR MANUFACTURING            |
| (11) EP2846831                        | POLYPEPTIDE HETEROMULTIMER           | MESOPOROUS SILICA                        |
| (21) EP13787931.8                     | (73) Chugai Seiyaku Kabushiki Kaisha | NANOPARTICLES                            |
| (47) 07.07.2021                       | (72) IGAWA, Tomoyuki                 | WITH ENCAPSULATED                        |
| (87) US2013040661                     | KATADA, Hitoshi                      | SUPERPARAMAGNETIC CLUSTERS               |
| 14.11.2013                            | MIMOTO, Futa                         | (73) Luxembourg Institute of Science and |
| (22) 10.05.2013                       | (31) 2013200845                      | Technology (LIST)                        |
| (54) USE OF SEMAPHORIN-4D BINDING     | (32) 27.09.2013                      | (72) CORNE, Gaëlle                       |
| MOLECULES TO PROMOTE                  | (33) Japan                           | THOMANN, Jean-Sébastien                  |
| NEUROGENESIS FOLLOWING                | (51) A61K 39/42                      | (31) 100581                              |
| STROKE                                | A61P 31/18                           | (32) 20.12.2017                          |
| (73) Vaccinex, Inc.                   | C07K 16/10                           | (33) Luxembourg                          |
| (72) SMITH, Ernest S.                 | C07K 16/46                           | (51) A61K 45/06                          |
| ZAUDERER, Maurice                     | A61K 47/68                           | (11) EP2945652                           |
| (31) 201261646119 P                   | (11) EP3365366                       | (21) EP14702185.1                        |
| 201313842523                          | (21) EP16794472.7                    | (47) 07.07.2021                          |
| (32) 11.05.2012                       | (47) 14.07.2021                      | (87) US2014012136                        |
| 15.03.2013                            | (87) US2016058540                    | 24.07.2014                               |
| (33) United States of America         | 04.05.2017                           | (22) 17.01.2014                          |
| United States of America              | (22) 24.10.2016                      | (54) METHODS OF TREATING                 |
| (51) A61K 39/395                      | (54) TRISPECIFIC AND/OR TRIVALENT    | CHOLANGIOCARCINOMA                       |
| A61K 45/00                            | BINDING PROTEINS FOR                 | (73) Foundation Medicine, Inc.           |
| A61P 25/00                            | PREVENTION OR TREATMENT OF HIV       | (72) MILLER, Vincent, A.                 |
| G01N 33/48                            | INFECTION                            | ALI, Siraj, Mahamed                      |
| (11) EP3299810                        | (73) SANOFI                          | HAWRYLUK, Matthew, J.                    |
| (21) EP16796547.4                     | THE USA, AS REPRESENTED BY           | HE, Jie                                  |
| (47) 07.07.2021                       | THE SECRETARY, DEPARTMENT OF         | LIPSON, Doron                            |
| (87) JP2016064818                     | HEALTH AND HUMAN SERVICES            | ROSS, Jeffrey, S.                        |
| 24.11.2016                            | (72) YANG, Zhi-Yong                  | STEPHENS, Philip, James                  |
| (22) 19.05.2016                       | NABEL, Gary, J.                      | (31) 201361754509 P                      |
| (54) METHOD FOR DETERMINING           | XU, Ling                             | 201361756372 P                           |
| APPLICATION OF NOVEL THERAPY          | WEI, Ronnie                          | (32) 18.01.2013                          |
| TO MULTIPLE SCLEROSIS (MS)            | QIU, Huawei                          | 24.01.2013                               |
| PATIENT                               | BENINGA, Jochen                      | (33) United States of America            |
| (73) National Center of Neurology and | KRUIP, Jochen                        | United States of America                 |
| Psychiatry                            | RAO, Ercole                          | (51) A61K 48/00                          |
| Chugai Seiyaku Kabushiki Kaisha       | LEUSCHNER, Wulf, Dirk                | A61P 27/02                               |
| (72) YAMAMURA, Takashi                | BEIL, Christian                      | C07K 14/705                              |
| NAKAMURA, Masakazu                    | LANGHE, Christian                    | C12N 15/86                               |

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| (11) EP3393522                                | (32) 20.05.2015                           | Barnell, Jeffrey                         |
| (21) EP16825400.1                             | 13.10.2015                                | (31) 201816218112                        |
| (47) 07.07.2021                               | (33) European Patent Office (EPO)         | (32) 12.12.2018                          |
| (87) EP2016082149                             | World Intellectual Property Office (WIPO) | (33) United States of America            |
| 29.06.2017                                    | (51) A61K 51/00                           | (51) A61L 2/08                           |
| (22) 21.12.2016                               | A61P 39/04                                | A61L 29/14                               |
| (54) IMPROVED HYBRID DUAL                     | C07D 213/79                               | A61M 25/00                               |
| RECOMBINANT AAV VECTOR                        | C07D 257/02                               | (11) EP3585449                           |
| SYSTEMS FOR GENE THERAPY                      | C07D 401/06                               | (21) EP18708814.1                        |
| (73) INSERM (Institut National de la Santé et | C07F 7/24                                 | (47) 14.07.2021                          |
| de la Recherche Médicale)                     | C07F 9/94                                 | (87) US2018018780                        |
| Université de Nantes                          | (11) EP3227272                            | 30.08.2018                               |
| Centre Hospitalier Universitaire De           | (21) EP15807634.9                         | (22) 20.02.2018                          |
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| Université de Montpellier                     | (87) EP2015078732                         | RELEASE FLUIDS AND ASSEMBLIES            |
| (72) KALATZIS, Vasiliki                       | 09.06.2016                                | CONTAINING THE SAME                      |
| FRANCOIS, Achille                             | (22) 04.12.2015                           | (73) Hollister Incorporated              |
| (31) 15307104                                 | (54) BIFUNCTIONAL DO2PA DERIVATIVES,      | (72) FARRELL, David                      |
| (32) 22.12.2015                               | CHELATES WITH METALLIC CATIONS            | PANESAR, Satwinder, S.                   |
| (33) European Patent Office (EPO)             | AND USE THEREOF                           | NAUGHTON, Vincent                        |
| (51) A61K 48/00                               | (73) Centre National de la Recherche      | O'BRIEN, Daniel E.                       |
| C12N 15/10                                    | Scientifique (CNRS)                       | (31) 201762461730 P                      |
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| (47) 14.07.2021                               | BEYLER, Maryline                          | 15.08.2017                               |
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| (22) 20.05.2016                               | (32) 05.12.2014                           | (51) A61L 2/08                           |
| (54) DRY POWDER COMPOSITION                   | (33) European Patent Office (EPO)         | B65B 55/02                               |
| COMPRISING LONG-CHAIN RNA                     | (51) A61K 51/04                           | H05K 7/14                                |
| (73) CureVac AG                               | A61P 35/00                                | (11) EP3107809                           |
| (72) EBER, Fabian, Johannes                   | C07D 257/02                               | (21) EP15700505.9                        |
| YAZDAN PANAHA, Benyamin                       | (11) EP2970154                            | (47) 07.07.2021                          |
| SEWIG, Stefanie                               | (21) EP14779019.0                         | (87) EP2015051063                        |
| KETTERER, Thomas                              | (47) 07.07.2021                           | 27.08.2015                               |
| MUTZKE, Thorsten                              | (87) US2014024048                         | (22) 21.01.2015                          |
| ROOS, Tilmann                                 | 09.10.2014                                | (54) POWER SUPPLY UNIT                   |
| SONNTAG, Michael                              | (22) 12.03.2014                           | (73) Tetra Laval Holdings & Finance S.A. |
| WIGGENHORN, Michael                           | (54) TETRAHYDROXAMATE CHELATORS           | (72) IZRAILIT, Iosif                     |
| KOLLAND, Katharina                            | OF ZIRCONIUM89 AND NIOBIUM90              | (31) 1450202                             |
| (31) 15001517                                 | FOR USE IN DIAGNOSTIC                     | (32) 19.02.2014                          |
| PCT/EP2015/002018                             | APPLICATIONS                              | (33) Sweden                              |
| (32) 20.05.2015                               | (73) The U.S.A. as represented by the     | (51) A61L 2/10                           |
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| (51) A61K 48/00                               | GUERARD, Francois                         | (21) EP17204628.6                        |
| C12N 15/10                                    | LEE, Yong-Sok                             | (47) 07.07.2021                          |
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| (47) 14.07.2021                               | (33) United States of America             | LIQUIDS                                  |
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| (22) 20.05.2016                               | A61L 2/20                                 | (51) A61L 2/18                           |
| (54) DRY POWDER COMPOSITION                   | B65B 5/04                                 | A61L 2/22                                |
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| (73) CureVac AG                               | B65B 49/08                                | (11) EP3391912                           |
| (72) EBER, Fabian, Johannes                   | B65B 53/06                                | (21) EP18305489.9                        |
| YAZDAN PANAHA, Benyamin                       | B65B 55/18                                | (47) 14.07.2021                          |
| SEWIG, Stefanie                               | B65D 75/00                                | (22) 20.04.2018                          |
| KETTERER, Thomas                              | B65D 81/20                                | (54) FACILITY FOR DISINFECTION           |
| MUTZKE, Thorsten                              | (11) EP3666668                            | TREATMENT OF HOSPITAL CARTS              |
| ROOS, Tilmann                                 | (21) EP19213590.3                         | AND METHOD FOR IMPLEMENTING              |
| SONNTAG, Michael                              | (47) 07.07.2021                           | SAME                                     |
| WIGGENHORN, Michael                           | (22) 04.12.2019                           | (73) Techni Brume Diffusion SARL - TBD   |
| KOLLAND, Katharina                            | (54) SHRINK-FORMED PACKAGE                | (72) CHAVANTRE, Didier                   |
| (31) 15001517                                 | (73) Medtronic Vascular Inc.              | MONTOURCY, Thierry                       |
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| (33) France                         | (31) 201361916829 P                            | CARTILAGE GRAFT AND USES                   |
| (51) A61L 9/03                      | (32) 17.12.2013                                | THEREOF                                    |
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| A24F 40/42                          | C08L 77/00                                     | CHANG, Ming-Yao                            |
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| (54) AN AEROSOL GENERATING SYSTEM   | 01.03.2018                                     | A61L 27/38                                 |
| WITH LEAKAGE PREVENTION             | (22) 16.08.2017                                | A61L 27/60                                 |
| (73) Philip Morris Products S.A.    | (54) WOUND DRESSING COMPRISING                 | (11) EP3294356                             |
| (72) COCHAND, Olivier Yves          | POLYMER FIBERS                                 | (21) EP16725382.2                          |
| DUBIEF, Flavien                     | (73) Friedrich-Alexander-Universität Erlangen- | (47) 07.07.2021                            |
| FLICK, Jean-Marc                    | Nürnberg                                       | (87) EP2016060352                          |
| THORENS, Michel                     | Universitätsklinikum Erlangen                  | 17.11.2016                                 |
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| (32) 03.12.2010                     | FUCHSLUGER, Thomas                             | (54) COMPOSITIONS COMPRISING               |
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| (51) A61L 9/12                      | STAFIEJ, Piotr                                 | USES THEREOF                               |
| (11) EP2419150                      | (31) 16185130                                  | (73) Université Catholique de Louvain      |
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| VOLATILE MATERIAL                   | (21) EP18780163.4                              | European Patent Office (EPO)               |
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| STANLEY, Scott, Kendyl              | (22) 09.10.2018                                | A61P 17/02                                 |
| STILL, James, Douglas               | (54) METHOD FOR THE PRODUCTION OF              | A61P 43/00                                 |
| SORDO, Walter                       | SUPERABSORBERS                                 | C12N 5/0775                                |
| DEFLORIAN, Stefano                  | (73) BASF SE                                   | A61K 35/28                                 |
| MORHAIN, Cedric                     | (72) STEPHAN, Oskar                            | (11) EP2994173                             |
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| (33) Canada                         | CATTERNAN, Tom                                 | ENGINEERING                                |
| United States of America            | (31) 17196957                                  | (73) Children's Medical Center Corporation |
| United States of America            | (32) 18.10.2017                                | The Brigham and Women's Hospital, Inc.     |
| (51) A61L 15/26                     | (33) European Patent Office (EPO)              | Va Boston Healthcare System                |
| A61L 15/42                          | (51) A61L 27/04                                | (72) FRANK, Markus, H.                     |
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| A61L 27/50                          | A61L 27/54                                     | ORGILL, Dennis, P.                         |
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| B32B 5/26                           | (54) GOLD PARTICLES FOR USE IN                 | (51) A61L 27/34                            |
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| (54) A TISSUE SUBSTITUTE MULTILAYER | (47) 07.07.2021                                | OF MANUFACTURE                             |
| MATRIX AND USES THEREOF             | (87) CN2016094633                              | (73) Hothouse Medical Limited              |
| (73) Nurami Medical Ltd             | 16.02.2017                                     | (72) STEVENSON, David Granville            |
| (72) NSEIR MANASSA, Nora            | (22) 11.08.2016                                | ASHTON, Timothy Rawden                     |

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| (73) Warsaw Orthopedic, Inc.                                                  | (22) 20.03.2018                                                                                                                                                   | (31) 344542 P                                                           |
| (72) WEI, Guobao                                                              | (54) APPARATUS COMPRISING DEVICE FOR DETERMINING AN ESPECIALLY GEOMETRICAL PROPERTY OF THE APPARATUS                                                              | 201113205452                                                            |
| SHIMP, Lawrence A.                                                            | (73) Fresenius Medical Care Deutschland GmbH                                                                                                                      | (32) 16.08.2010                                                         |
| DEAN, Sheldon W., III                                                         | (72) HEIDE, Alexander                                                                                                                                             | 08.08.2011                                                              |
| DECARO, Mark                                                                  | NIKOLIC, Dejan                                                                                                                                                    | (33) United States of America                                           |
| SCHWARZ, Carl R.                                                              | (31) 102017106404                                                                                                                                                 | United States of America                                                |
| OUKO, Martin O.                                                               | (32) 24.03.2017                                                                                                                                                   | (51) A61M 5/00                                                          |
| BEHNAM, Keyvan                                                                | (33) Germany                                                                                                                                                      | A61M 5/20                                                               |
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| A61L 31/14                                                                    | (54) BLOOD GAS EXCHANGER WITH RESTRICTION ELEMENT OR ELEMENTS TO REDUCE GAS EXCHANGE                                                                              | (47) 07.07.2021                                                         |
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| (54) PHOTOINITIATING POLYMERISABLE COMPOSITION                                | (21) EP18724052.8                                                                                                                                                 | (31) 201461951590 P                                                     |
| (73) Lancaster University Business Enterprises Limited                        | (47) 14.07.2021                                                                                                                                                   | (32) 12.03.2014                                                         |
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| (51) A61M 1/00                                                                | (73) Fresenius Medical Care Holdings, Inc.                                                                                                                        | (11) EP2753383                                                          |
| B01D 71/54                                                                    | (72) KALASKAR, Shashikant Dattatraya                                                                                                                              | (21) EP12815757.5                                                       |
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| C08G 18/50                                                                    | (33) United States of America                                                                                                                                     | (54) RELOADABLE AUTO-INJECTOR                                           |
| C08G 18/66                                                                    | (51) A61M 1/36                                                                                                                                                    | (73) Merck Patent GmbH                                                  |
| C08G 18/76                                                                    | (11) EP3782671                                                                                                                                                    | (72) BECHMANN, Soeren                                                   |
| C08G 75/23                                                                    | (21) EP19192317.6                                                                                                                                                 | MADSEN, Flemming                                                        |
| C08L 81/06                                                                    | (47) 07.07.2021                                                                                                                                                   | JOHANSEN, Esben, W.                                                     |
| C08G 75/20                                                                    | (22) 19.08.2019                                                                                                                                                   | (31) 201161532892 P                                                     |
| (11) EP3497145                                                                | (54) METHOD FOR PRIMING AN EXTRACORPOREAL BLOOD CIRCUIT OF AN APPARATUS FOR EXTRACORPOREAL TREATMENT OF BLOOD AND APPARATUS FOR EXTRACORPOREAL TREATMENT OF BLOOD | (32) 09.09.2011                                                         |
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| (22) 07.08.2017                                                               |                                                                                                                                                                   | A61M 5/50                                                               |
| (54) COMPOSITION COMPRISING AROMATIC AND FLUORINATED POLYMERS AND USE THEREOF |                                                                                                                                                                   | A61M 25/10                                                              |
| (73) Solvay Specialty Polymers Italy S.p.A.                                   |                                                                                                                                                                   | (11) EP3419692                                                          |
| (72) DI NICOLÒ, Emanuele                                                      |                                                                                                                                                                   | (21) EP17757339.1                                                       |
| MACCONE, Patrizia                                                             |                                                                                                                                                                   | (47) 07.07.2021                                                         |
| PETRICCI, Silvia Rita                                                         |                                                                                                                                                                   | (87) US2017019438                                                       |
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| (32) 09.08.2016                                                               |                                                                                                                                                                   | (54) ACTUATING MECHANISM FOR FLUID DISPLACEMENT AND PRESSURIZING DEVICE |
|                                                                               |                                                                                                                                                                   | (73) Atrion Medical Products, Inc.                                      |

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| (51) A61M 5/00<br>G16H 20/17<br>G16H 50/20<br>(11) EP3567594<br>(21) EP18171649.9<br>(47) 07.07.2021<br>(22) 09.05.2018<br>(54) DIABETES MANAGEMENT SYSTEM<br>WITH DYNAMIC SELECTION OF<br>PREDICTION LOGIC<br>(73) SAP SE<br>(72) KOPP, Ulrich<br>RIEGEL, Lukas                                                                                                                     | (31) 201514952068<br>(32) 25.11.2015<br>(33) United States of America<br>(51) A61M 5/142<br>A61M 5/168<br>(11) EP2968748<br>(21) EP14775822.1<br>(47) 07.07.2021<br>(87) US2014021109<br>02.10.2014<br>(22) 06.03.2014<br>(54) SYSTEM AND METHOD FOR<br>INTEGRATION OF INSULIN PUMPS<br>AND CONTINUOUS GLUCOSE<br>MONITORING<br>(73) Tandem Diabetes Care, Inc.<br>(72) ROSINKO, Mike<br>SAINT, Sean<br>FARNAN, Jason<br>BUCHANNAN, Shawn<br>(31) 201313800453<br>(32) 13.03.2013<br>(33) United States of America | (51) A61M 5/20<br>A61M 5/31<br>(11) EP3366335<br>(21) EP17157417.1<br>(47) 14.07.2021<br>(22) 22.02.2017<br>(54) RECORDING UNIT FOR MEDICAMENT<br>DELIVERY DEVICE<br>(73) SHL Medical AG<br>(72) SÄLL, Daniel<br>CARLSSON, Daniel<br>HALLSTRÖM, Ola                                                                                                       |
| (51) A61M 5/14<br>(11) EP3411096<br>(21) EP17706310.4<br>(47) 14.07.2021<br>(87) IB2017050525<br>10.08.2017<br>(22) 01.02.2017<br>(54) FOOT VALVE FOR DRIP CHAMBERS<br>OF MEDICAL INFUSION OR<br>TRANSFUSION APPARATUSES<br>(73) Industrie Borla SpA<br>(72) GUALA, Gianni<br>(31) UB20160113<br>(32) 05.02.2016<br>(33) Italy                                                       | (51) A61M 5/145<br>A61M 5/155<br>(11) EP3609556<br>(21) EP18722121.3<br>(47) 07.07.2021<br>(87) FR2018050859<br>18.10.2018<br>(22) 06.04.2018<br>(54) AUTOMATIC FLUID PRODUCT<br>INJECTION DEVICE<br>(73) Aptar France SAS<br>(72) REEVES, Sam<br>(31) 1753093<br>(32) 10.04.2017<br>(33) France                                                                                                                                                                                                                   | (51) A61M 5/20<br>A61M 5/315<br>(11) EP3621678<br>(21) EP18721393.9<br>(47) 07.07.2021<br>(87) EP2018061699<br>15.11.2018<br>(22) 07.05.2018<br>(54) PISTON ROD BRAKE MECHANISM<br>(73) Novo Nordisk A/S<br>(72) JAKOBSEN, Nikolaj, Eusebius<br>HANSEN, Steffen<br>(31) 17170660<br>(32) 11.05.2017<br>(33) European Patent Office (EPO)                  |
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|                                                                                                                                                |                                                                              |                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| (72) KLITMOSE, Lars, Peter<br>JENSEN, Nicolai, Michael                                                                                         | Slupecki, Patrice                                                            | France                                                                                        |
| (31) 16201782                                                                                                                                  | (72) Slupecki, Annie                                                         | (51) A61M 11/00                                                                               |
| (32) 01.12.2016                                                                                                                                | Slupecki, Patrice                                                            | A61M 15/00                                                                                    |
| (33) European Patent Office (EPO)                                                                                                              | (31) 1902173                                                                 | A61M 15/08                                                                                    |
| (51) A61M 5/24                                                                                                                                 | (32) 02.03.2019                                                              | B05B 1/00                                                                                     |
| A61M 5/28                                                                                                                                      | (33) France                                                                  | B05B 1/12                                                                                     |
| A61M 5/31                                                                                                                                      | (51) A61M 11/00                                                              | B05B 1/34                                                                                     |
| A61M 5/315                                                                                                                                     | A61M 11/02                                                                   | B65D 83/14                                                                                    |
| A61M 39/04                                                                                                                                     | A61M 15/00                                                                   | B65D 83/20                                                                                    |
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| (47) 14.07.2021                                                                                                                                | (21) EP17878112.6                                                            | (11) EP3552644                                                                                |
| (22) 28.10.2010                                                                                                                                | (47) 14.07.2021                                                              | (21) EP18209877.2                                                                             |
| (54) CARTRIDGE FOR A DRUG DELIVERY<br>DEVICE                                                                                                   | (87) US2017065289                                                            | (47) 07.07.2021                                                                               |
| (73) Sanofi-Aventis Deutschland GmbH                                                                                                           | 14.06.2018                                                                   | (22) 03.12.2018                                                                               |
| (72) Teucher, Axel                                                                                                                             | (22) 08.12.2017                                                              | (54) APPLICATOR HEAD FOR NASAL<br>APPLICATION OF FLUID FROM A<br>PRESSURE ACCUMULATOR         |
| Jugl, Michael                                                                                                                                  | (54) INHALER                                                                 | (73) Aptar Radolfzell GmbH                                                                    |
| (31) 09174670                                                                                                                                  | (73) MicroDose Therapeutx, Inc.                                              | (72) GREINER-PERTH, Jürgen                                                                    |
| (32) 30.10.2009                                                                                                                                | (72) KEIP, Jeffrey, D.                                                       | SCHMID, Felix                                                                                 |
| (33) European Patent Office (EPO)                                                                                                              | MORRISON, Mark, Steven                                                       | (31) PCT/EP2018/059583                                                                        |
| (51) A61M 5/31                                                                                                                                 | WEITZEL, Douglas, E.                                                         | (32) 13.04.2018                                                                               |
| A61M 5/315                                                                                                                                     | (31) 201662432237 P                                                          | (33) World Intellectual Property Office (WIPO)                                                |
| (11) EP3021911                                                                                                                                 | (32) 09.12.2016                                                              | (51) A61M 11/00                                                                               |
| (21) EP14739829.1                                                                                                                              | (33) United States of America                                                | B05B 17/00                                                                                    |
| (47) 14.07.2021                                                                                                                                | (51) A61M 11/00                                                              | B05B 17/06                                                                                    |
| (87) EP2014065340                                                                                                                              | A61M 11/04                                                                   | (11) EP3423194                                                                                |
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| (22) 17.07.2014                                                                                                                                | A61M 15/06                                                                   | (47) 07.07.2021                                                                               |
| (54) DRUG DELIVERY DEVICE                                                                                                                      | A61M 16/00                                                                   | (87) EP2017055222                                                                             |
| (73) SANOFI                                                                                                                                    | A24F 47/00                                                                   | 08.09.2017                                                                                    |
| (72) OAKLEY, Tom                                                                                                                               | (11) EP3508083                                                               | (22) 06.03.2017                                                                               |
| HEWSON, Karl                                                                                                                                   | (21) EP19158510.8                                                            | (54) A MONOLITHIC INTEGRATED MESH<br>DEVICE FOR FLUID DISPENSERS AND<br>METHOD OF MAKING SAME |
| MILNE, Stuart                                                                                                                                  | (47) 14.07.2021                                                              | (73) University College Cork-National<br>University of Ireland, Cork                          |
| PAWULSKI, Mark                                                                                                                                 | (22) 23.08.2011                                                              | (72) JACKSON, Nathan                                                                          |
| (31) 13176883                                                                                                                                  | (54) INHALATION DEVICE INCLUDING<br>SUBSTANCE USAGE CONTROLS                 | MATHEWSON, Alan                                                                               |
| (32) 17.07.2013                                                                                                                                | (73) JT International S.A.                                                   | OLSZEWSKI, Zbigniew                                                                           |
| (33) European Patent Office (EPO)                                                                                                              | (72) Alelov, Eli                                                             | (31) 201603823                                                                                |
| (51) A61M 5/315                                                                                                                                | (31) 40213610 P                                                              | (32) 04.03.2016                                                                               |
| F16H 25/20                                                                                                                                     | (32) 24.08.2010                                                              | (33) United Kingdom                                                                           |
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| (47) 07.07.2021                                                                                                                                | A61M 15/00                                                                   | (21) EP19173144.7                                                                             |
| (22) 28.10.2016                                                                                                                                | A61M 15/06                                                                   | (47) 07.07.2021                                                                               |
| (54) TWO-STAGE TELESCOPIC SPINDLE<br>DRIVE                                                                                                     | A24F 47/00                                                                   | (22) 17.11.2017                                                                               |
| (73) maxon international ag                                                                                                                    | (11) EP3600505                                                               | (54) DRUG DELIVERY DEVICE WITH<br>ELECTRONICS                                                 |
| (72) Horn, Carsten                                                                                                                             | (21) EP18726517.8                                                            | (73) Norton (Waterford) Limited                                                               |
| (51) A61M 5/32                                                                                                                                 | (47) 07.07.2021                                                              | (72) Calderon Oliveras, Enrique                                                               |
| B05D 3/00                                                                                                                                      | (87) FR2018050828                                                            | Lewis, Carl L                                                                                 |
| B05D 3/04                                                                                                                                      | 04.10.2018                                                                   | Cotton, Symon D'Oyly                                                                          |
| B05D 3/10                                                                                                                                      | (22) 03.04.2018                                                              | Gardner, Steven D                                                                             |
| B05D 3/12                                                                                                                                      | (54) PORTABLE DEVICE FOR INHALATION<br>OF AT LEAST ONE ACTIVE<br>COMPOSITION | Kivlin, Robert O                                                                              |
| B05D 7/14                                                                                                                                      | (73) ENOVAP                                                                  | (31) 201662424306 P                                                                           |
| B05D 7/22                                                                                                                                      | (72) SCHECK, Alexandre                                                       | (32) 18.11.2016                                                                               |
| C03C 17/00                                                                                                                                     | ABULFEDA, Julien                                                             | (33) United States of America                                                                 |
| C03C 17/22                                                                                                                                     | DELAHAYE, Valentin                                                           | (51) A61M 15/00                                                                               |
| (11) EP3705192                                                                                                                                 | MATTE, Jean-Baptiste                                                         | G09B 19/24                                                                                    |
| (21) EP20158423.2                                                                                                                              | FISCHER, Alexis                                                              | (11) EP3443554                                                                                |
| (47) 07.07.2021                                                                                                                                | DE LACROIX DE RAVIGNAN, Aymard                                               | (21) EP16898796.4                                                                             |
| (22) 20.02.2020                                                                                                                                | HARANG, Marie                                                                | (47) 14.07.2021                                                                               |
| (54) METHOD FOR APPLYING A<br>FLUORINATED AND/OR CERAMIC<br>COATING TO AN INTERNAL WALL OF<br>A LOW DIAMETER TUBE, SUCH AS A<br>SYRINGE NEEDLE | MONTANARI, Damien                                                            | (87) US2016027107                                                                             |
| (73) Slupecki, Annie                                                                                                                           | (31) 1752797                                                                 | 19.10.2017                                                                                    |
|                                                                                                                                                | 1752799                                                                      |                                                                                               |
|                                                                                                                                                | (32) 31.03.2017                                                              |                                                                                               |
|                                                                                                                                                | 31.03.2017                                                                   |                                                                                               |
|                                                                                                                                                | (33) France                                                                  |                                                                                               |

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| (54) METERED DOSE INHALER TRAINING DEVICE   | F04D 27/00                              | (47) 07.07.2021                            |
| (73) Noble International, Inc.              | F04D 29/28                              | (87) US2017057187                          |
| (72) BAKER, Jeff                            | H02P 6/08                               | 26.04.2018                                 |
| SIEMER, Francis, Michael                    | H02P 6/34                               | (22) 18.10.2017                            |
| CHUNG, Christopher Wai Yin                  | H02P 27/04                              | (54) MOISTURE REMOVAL AND                  |
| (51) A61M 16/00                             | (11) EP3195464                          | CONDENSATION AND HUMIDITY                  |
| A61M 16/06                                  | (21) EP15842310.3                       | MANAGEMENT APPARATUS FOR A                 |
| A61M 16/10                                  | (47) 07.07.2021                         | BREATHING CIRCUIT                          |
| A61M 16/16                                  | (87) US2015050429                       | (73) Teleflex Medical Incorporated         |
| (11) EP2945678                              | 24.03.2016                              | (72) DWYER, Daniel Patrick                 |
| (21) EP14740791.0                           | (22) 16.09.2015                         | LOREK, James                               |
| (47) 07.07.2021                             | (54) INDUCTION MOTOR CONTROL            | (31) 201662410195 P                        |
| (87) AU2014000026                           | (73) ResMed Motor Technologies Inc      | (32) 19.10.2016                            |
| 24.07.2014                                  | (72) FLEMING, David James               | (33) United States of America              |
| (22) 16.01.2014                             | GRUNBERG, Michael                       | (51) A61M 25/00                            |
| (54) CUSHION MEMBER FOR A PATIENT INTERFACE | NAGORNY, Aleksandr, S.                  | A61M 25/01                                 |
| (73) ResMed Pty Ltd                         | SADEGHI, Siavash                        | A61M 25/04                                 |
| (72) SCHEINER, Rupert, Christian            | (31) 201462052020 P                     | A61M 27/00                                 |
| HITCHCOCK, William Laurence                 | 201562135880 P                          | (11) EP2666506                             |
| BARBARA, Anthony, Paul                      | (32) 18.09.2014                         | (21) EP13168751.9                          |
| BARLOW, Adam Francis                        | 20.03.2015                              | (47) 14.07.2021                            |
| EDWARDS, Craig, David                       | (33) United States of America           | (22) 22.05.2013                            |
| GOLDSPINK, Lachlan, Richard                 | United States of America                | (54) Catheter curvature braces             |
| HASKARD, Kirrily Michele                    | (51) A61M 16/06                         | (73) Integra LifeSciences Switzerland Sàrl |
| LEE, Murray, William                        | (11) EP3687611                          | (72) DEXTRADEUR, Alan                      |
| MAY, Frederick Arlet                        | (21) EP18773142.7                       | (31) 201213478487                          |
| RUMMERY, Gerard Michael                     | (47) 07.07.2021                         | (32) 23.05.2012                            |
| SHANMUGA SUNDARA, Shiva Kumar               | (87) EP2018075112                       | (33) United States of America              |
| TAN, Chia Ik                                | 04.04.2019                              | (51) A61M 25/00                            |
| WAGNER, Stewart, Joseph                     | (22) 18.09.2018                         | A61M 25/06                                 |
| WELLS, Alicia, Kristianne                   | (54) CUSHION WITH PROTRUSION            | (11) EP3570926                             |
| FORRESTER, Martin                           | AND PATIENT INTERFACE DEVICE            | (21) EP18713392.1                          |
| JOURDAN, Ralph                              | INCLUDING SAME                          | (47) 07.07.2021                            |
| (31) 2013900132                             | (73) Koninklijke Philips N.V.           | (87) US2018014147                          |
| 60590713                                    | (72) CHODKOWSKI, Lauren, Patricia       | 26.07.2018                                 |
| 2013900168                                  | BAIKO, Robert, William                  | (22) 18.01.2018                            |
| 201361817674 P                              | GRASHOW, Jonathan, Sayer                | (54) INTRODUCER WITH EXPANDABLE            |
| 201361823192 P                              | (31) 201762564309 P                     | CAPABILITIES                               |
| 201361823353 P                              | (32) 28.09.2017                         | (73) Boston Scientific Scimed, Inc.        |
| 201361837521 P                              | (33) United States of America           | (72) ANDERSON, James M.                    |
| 201361839916 P                              | (51) A61M 16/06                         | GROVENDER, Adam David                      |
| 201361904974 P                              | A62B 9/00                               | REYNOLDS, Brian R.                         |
| (32) 16.01.2013                             | A62B 18/08                              | OLSON, Ross A.                             |
| 16.01.2013                                  | F16B 2/16                               | HETTEEN, Heather                           |
| 18.01.2013                                  | F16B 2/18                               | AGU, Uchenna Junior                        |
| 30.04.2013                                  | F16G 11/10                              | (31) 201762447543 P                        |
| 14.05.2013                                  | F16H 19/02                              | (32) 18.01.2017                            |
| 14.05.2013                                  | F16H 19/04                              | (33) United States of America              |
| 20.06.2013                                  | (11) EP3430284                          | (51) A61M 25/00                            |
| 27.06.2013                                  | (21) EP17765963.8                       | B29C 45/00                                 |
| 15.11.2013                                  | (47) 14.07.2021                         | B29C 45/14                                 |
| (33) Australia                              | (87) IB2017051522                       | B29C 45/26                                 |
| New Zealand                                 | 21.09.2017                              | B29L 31/00                                 |
| Australia                                   | (22) 16.03.2017                         | (11) EP3527347                             |
| United States of America                    | (54) DIRECTIONAL LOCK FOR INTERFACE     | (21) EP19158020.8                          |
| United States of America                    | HEADGEAR ARRANGEMENT                    | (47) 14.07.2021                            |
| United States of America                    | (73) Fisher & Paykel Healthcare Limited | (22) 19.02.2019                            |
| United States of America                    | (72) HAMMER, Jeroen                     | (54) METHOD FOR MANUFACTURING              |
| United States of America                    | KAPELEVICH, Vitaly                      | CATHETER AND CATHETER                      |
| United States of America                    | (31) 201662309394 P                     | MANUFACTURED BY THIS                       |
| United States of America                    | 201662343711 P                          | MANUFACTURING METHOD                       |
| (51) A61M 16/00                             | (32) 16.03.2016                         | (73) Terumo Kabushiki Kaisha               |
| A61M 16/10                                  | 31.05.2016                              | (72) INUKAI, Takito                        |
| A61M 16/16                                  | (33) United States of America           | MATSUSHITA, Shun                           |
| F04D 15/02                                  | United States of America                | OTAKE, Yuya                                |
| F04D 17/16                                  | (51) A61M 16/08                         | HAMURO, Kota                               |
|                                             | (11) EP3528880                          | (31) 2018028006                            |

|                                    |                                           |                               |
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| 2018179812                         | (33) United States of America             | (54) BLOOD PUMP               |
| (32) 20.02.2018                    | (51) A61M 39/10                           | (73) Haemaflow Limited        |
| 26.09.2018                         | (11) EP2996760                            | (72) JOHNS, William Richard   |
| (33) Japan                         | (21) EP14730708.6                         | KNIGHT, Ronald Kelvin         |
| Japan                              | (47) 07.07.2021                           | (31) 201615650                |
| (51) A61M 25/01                    | (87) US2014038391                         | (32) 14.09.2016               |
| A61M 25/06                         | 20.11.2014                                | (33) United Kingdom           |
| A61M 25/18                         | (22) 16.05.2014                           | (51) A61M 60/148              |
| (11) EP3568187                     | (54) MECHANICAL FRICTION                  | A61M 60/205                   |
| (21) EP18763445.6                  | ENHANCEMENT FOR THREADED                  | A61M 60/50                    |
| (47) 07.07.2021                    | CONNECTION INCORPORATING                  | (11) EP3377133                |
| (87) US2018021155                  | CRUSHABLE RIBS                            | (21) EP16866943.0             |
| 13.09.2018                         | (73) Becton Dickinson and Company Limited | (47) 14.07.2021               |
| (22) 06.03.2018                    | (72) WONG, Andrew                         | (87) US2016062023             |
| (54) BLOOD CONTAINMENT FOR IV      | (31) 201361824179 P                       | 26.05.2017                    |
| CATHETER                           | 201414278684                              | (22) 15.11.2016               |
| (73) Smiths Medical ASD, Inc.      | (32) 16.05.2013                           | (54) SYSTEM ARCHITECTURE THAT |
| (72) BREINDEL, Jay, T.             | 15.05.2014                                | ALLOWS PATIENT REPLACEMENT    |
| GORAL, David, J.                   | (33) United States of America             | OF VAD CONTROLLER/INTERFACE   |
| ROEHL, Christopher                 | United States of America                  | MODULE WITHOUT DISCONNECTION  |
| (31) 201762467397 P                | (51) A61M 39/10                           | OF OLD MODULE                 |
| 201762485146 P                     | F16L 23/00                                | (73) TC1 LLC                  |
| (32) 06.03.2017                    | F16L 23/04                                | (72) HANSEN, John Freddy      |
| 13.04.2017                         | F16L 35/00                                | (31) 201562258035 P           |
| (33) United States of America      | F16L 37/12                                | (32) 20.11.2015               |
| United States of America           | (11) EP3627029                            | (33) United States of America |
| (51) A61M 25/09                    | (21) EP19207463.1                         | (51) A61N 1/00                |
| (11) EP3323465                     | (47) 07.07.2021                           | A61N 1/02                     |
| (21) EP17198696.1                  | (22) 20.04.2017                           | A61N 1/04                     |
| (47) 07.07.2021                    | (54) A TAMPER-EVIDENT COVER               | A61N 1/08                     |
| (22) 26.10.2017                    | (73) Bio Pure Technology Limited          | A61N 1/18                     |
| (54) GUIDE WIRE                    | (72) SILLITOE, Chris                      | A61N 1/36                     |
| (73) Terumo Kabushiki Kaisha       | WHITE, Nick                               | (11) EP3498332                |
| (72) AOKI, Teruo                   | (31) 201606951                            | (21) EP19150254.1             |
| (31) 2016225474                    | 201620014                                 | (47) 14.07.2021               |
| (32) 18.11.2016                    | (32) 21.04.2016                           | (22) 21.01.2014               |
| (33) Japan                         | 25.11.2016                                | (54) DEVICES FOR CONTROLLING  |
| (51) A61M 25/10                    | (33) United Kingdom                       | TREMOR                        |
| (11) EP2988818                     | United Kingdom                            | (73) Cala Health, Inc.        |
| (21) EP14726247.1                  | (51) A61M 39/22                           | (72) ROSENBLUTH, Kathryn H.   |
| (47) 14.07.2021                    | F02M 63/00                                | DELP, Scott                   |
| (87) US2014032080                  | F16K 31/06                                | PADERI, John                  |
| 30.10.2014                         | F16K 41/10                                | RAJASEKHAR, Vijay             |
| (22) 27.03.2014                    | (11) EP3129689                            | ALTMAN, Tahel                 |
| (54) ANGIOPLASTY BALLOON HAVING    | (21) EP15711516.3                         | (31) 201361754945 P           |
| SELECTIVELY DEPLOYABLE CUTTING     | (47) 14.07.2021                           | 201361786549 P                |
| OR SCORING ELEMENT                 | (87) EP2015056082                         | 201361815919 P                |
| (73) Invatec S.p.A.                | 15.10.2015                                | 201361822215 P                |
| (72) SILVESTRO, Claudio            | (22) 23.03.2015                           | 201361857248 P                |
| (31) 201313870613                  | (54) ELECTROMAGNETICALLY ACTUATED         | (32) 21.01.2013               |
| (32) 25.04.2013                    | VALVE                                     | 15.03.2013                    |
| (33) United States of America      | (73) Fresenius Medical Care Deutschland   | 25.04.2013                    |
| (51) A61M 39/00                    | GmbH                                      | 10.05.2013                    |
| A61M 39/16                         | Rausch und Pausch GmbH                    | 23.07.2013                    |
| A61M 39/20                         | (72) SCHIEWECK, Werner                    | (33) United States of America |
| (11) EP3628367                     | DÖHLA, Werner                             | United States of America      |
| (21) EP19209953.9                  | SEEWALD, Olaf                             | United States of America      |
| (47) 14.07.2021                    | TEICHMANN, Michael                        | United States of America      |
| (22) 10.02.2014                    | (31) 102014005137                         | United States of America      |
| (54) DISINFECTION CAP FOR          | (32) 08.04.2014                           | (51) A61N 1/04                |
| DISINFECTING A MALE LUER END OF    | (33) Germany                              | A61N 1/32                     |
| AN INFUSION THERAPY DEVICE         | (51) A61M 60/00                           | A61N 1/36                     |
| (73) Becton, Dickinson and Company | (11) EP3512578                            | (11) EP3658220                |
| (72) LIU, Huibin                   | (21) EP17771535.6                         | (21) EP18758811.6             |
| HOANG, Minh Quang                  | (47) 14.07.2021                           | (47) 07.07.2021               |
| (31) 201313766556                  | (87) GB2017052706                         | (87) EP2018070473             |
| (32) 13.02.2013                    | 22.03.2018                                | 31.01.2019                    |
|                                    | (22) 14.09.2017                           | (22) 27.07.2018               |



|                                                                                                                                                  |                                                                                   |                                                                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|----------------------------------------------------------------------|
| (54) A DEVICE, E.G. A DYNAMIC ELECTRO ENHANCED PAIN CONTROL (DEEPC) DEVICE, FOR DELIVERY OF ELECTRICAL PULSES TO A DESIRED BODY PART OF A MAMMAL | (54) APPARATUS FOR IMPROVING COGNITIVE PERFORMANCE                                | (87) US2018018974                                                    |
| (73) Scandinavian ChemoTech AB                                                                                                                   | (73) The Trustees of the University of Pennsylvania                               | 13.09.2018                                                           |
| (72) FRICK, Mohan                                                                                                                                | (72) KAHANA, Michael                                                              | (22) 21.02.2018                                                      |
| PERSSON, Bertil RR                                                                                                                               | RIZZUTO, Daniel Sutton                                                            | (54) POST-HOC ATRIAL FIBRILLATION DETECTION                          |
| (31) 201762538402 P                                                                                                                              | (31) 201562107358 P                                                               | (73) Cardiac Pacemakers, Inc.                                        |
| (32) 28.07.2017                                                                                                                                  | 201562238871 P                                                                    | (72) PERSCHBACHER, David L.                                          |
| (33) United States of America                                                                                                                    | (32) 24.01.2015                                                                   | SAHA, Sunipa                                                         |
| (51) A61N 1/04                                                                                                                                   | 08.10.2015                                                                        | (31) 201762468194 P                                                  |
| A61N 1/36                                                                                                                                        | (33) United States of America                                                     | (32) 07.03.2017                                                      |
| (11) EP3562541                                                                                                                                   | United States of America                                                          | (33) United States of America                                        |
| (21) EP17822881.3                                                                                                                                | (51) A61N 1/05                                                                    | (51) A61N 1/362                                                      |
| (47) 14.07.2021                                                                                                                                  | A61N 1/372                                                                        | A61N 1/375                                                           |
| (87) US2017065243                                                                                                                                | (11) EP3563902                                                                    | A61N 1/39                                                            |
| 05.07.2018                                                                                                                                       | (21) EP19174013.3                                                                 | (11) EP3448511                                                       |
| (22) 08.12.2017                                                                                                                                  | (47) 14.07.2021                                                                   | (21) EP17721021.8                                                    |
| (54) ARTICLE FOR TREATING DIABETIC PERIPHERAL NEUROPATHY                                                                                         | (22) 12.11.2009                                                                   | (47) 07.07.2021                                                      |
| (73) Avent, Inc.                                                                                                                                 | (54) MICROFABRICATED NEUROSTIMULATION DEVICE                                      | (87) US2017029251                                                    |
| (72) OLLERENSHAW, Jeremy D.                                                                                                                      | (73) Ecole Polytechnique Fédérale de Lausanne                                     | 02.11.2017                                                           |
| ROLDAN, Leah M.                                                                                                                                  | (72) MERCANZINI, Andre                                                            | (22) 25.04.2017                                                      |
| BOURGEOIS, Elliot B.                                                                                                                             | RENAUD, Philippe                                                                  | (54) LATENCY-BASED ADAPTATION OF ANTI-TACHYARRHYTHMIA PACING THERAPY |
| SCHEPIS, Eric A.                                                                                                                                 | (31) 11391208 P                                                                   | (73) Medtronic Inc.                                                  |
| (31) 201662439283 P                                                                                                                              | (32) 12.11.2008                                                                   | (72) JACKSON, Troy E.                                                |
| (32) 27.12.2016                                                                                                                                  | (33) United States of America                                                     | GANION, Vincent P.                                                   |
| (33) United States of America                                                                                                                    | (51) A61N 1/30                                                                    | (31) 201615141741                                                    |
| (51) A61N 1/05                                                                                                                                   | A61N 1/32                                                                         | (32) 28.04.2016                                                      |
| A61N 1/20                                                                                                                                        | (11) EP2707088                                                                    | (33) United States of America                                        |
| A61N 1/30                                                                                                                                        | (21) EP12729208.4                                                                 | (51) A61N 1/368                                                      |
| A61N 1/32                                                                                                                                        | (47) 07.07.2021                                                                   | A61N 1/37                                                            |
| A61N 1/36                                                                                                                                        | (87) IB2012052327                                                                 | (11) EP3368150                                                       |
| (11) EP3512595                                                                                                                                   | 15.11.2012                                                                        | (21) EP16790855.7                                                    |
| (21) EP17777659.8                                                                                                                                | (22) 10.05.2012                                                                   | (47) 07.07.2021                                                      |
| (47) 07.07.2021                                                                                                                                  | (54) ELECTROPORATION DEVICE                                                       | (87) US2016058856                                                    |
| (87) IL2017051032                                                                                                                                | (73) Fondazione Istituto Italiano di Tecnologia                                   | 04.05.2017                                                           |
| 22.03.2018                                                                                                                                       | Consiglio Nazionale Delle Ricerche                                                | (22) 26.10.2016                                                      |
| (22) 13.09.2017                                                                                                                                  | (72) CANCEDDA, Laura                                                              | (54) MULTISITE PACING CAPTURE DETERMINATION BASED ON EVOKED RESPONSE |
| (54) DISC THERAPY APPARATUS                                                                                                                      | RATTO, Gian Michele                                                               | (73) Cardiac Pacemakers, Inc.                                        |
| (73) Rainbow Medical Ltd.                                                                                                                        | (31) TO20110411                                                                   | (72) SAHA, Sunipa                                                    |
| (72) GROSS, Yossi                                                                                                                                | (32) 11.05.2011                                                                   | HERRMANN, Keith L.                                                   |
| SOHN, Zev                                                                                                                                        | (33) Italy                                                                        | YU, Yinghong                                                         |
| (31) 201615263910                                                                                                                                | (51) A61N 1/36                                                                    | (31) 201562248683 P                                                  |
| (32) 13.09.2016                                                                                                                                  | A61N 1/372                                                                        | (32) 30.10.2015                                                      |
| (33) United States of America                                                                                                                    | H03M 1/12                                                                         | (33) United States of America                                        |
| (51) A61N 1/05                                                                                                                                   | H03M 1/46                                                                         | (51) A61N 1/372                                                      |
| A61N 1/36                                                                                                                                        | (11) EP2974034                                                                    | A61N 1/375                                                           |
| (11) EP3695880                                                                                                                                   | (21) EP14721672.5                                                                 | (11) EP3684465                                                       |
| (21) EP20168827.2                                                                                                                                | (47) 14.07.2021                                                                   | (21) EP18782619.3                                                    |
| (47) 14.07.2021                                                                                                                                  | (87) US2014030890                                                                 | (47) 14.07.2021                                                      |
| (22) 30.06.2017                                                                                                                                  | 18.09.2014                                                                        | (87) US2018051529                                                    |
| (54) SYSTEM FOR NEUROMODULATION                                                                                                                  | (22) 17.03.2014                                                                   | 28.03.2019                                                           |
| (73) GTX medical B.V.                                                                                                                            | (54) HIGH VOLTAGE MONITORING SUCCESSIVE APPROXIMATION ANALOG TO DIGITAL CONVERTER | (22) 18.09.2018                                                      |
| (72) MINASSIAN, Karen                                                                                                                            | (73) Alfred E. Mann Foundation for Scientific Research                            | (54) IMPLANTABLE MEDICAL DEVICE WITH MULTIPLE MODES OF OPERATION     |
| WAGNER, Fabien                                                                                                                                   | (72) LEE, Edward K. F.                                                            | (73) Cardiac Pacemakers, Inc.                                        |
| COURTINE, Grégoire                                                                                                                               | (31) 201361788926 P                                                               | (72) HUELSKAMP, Paul                                                 |
| (51) A61N 1/05                                                                                                                                   | (32) 15.03.2013                                                                   | BROCK II, Robert D.                                                  |
| A61N 1/36                                                                                                                                        | (33) United States of America                                                     | SCHMIDT, Brian L.                                                    |
| G16H 20/40                                                                                                                                       | (51) A61N 1/362                                                                   | (31) 201762561052 P                                                  |
| A61B 5/377                                                                                                                                       | A61N 1/365                                                                        | (32) 20.09.2017                                                      |
| (11) EP3247267                                                                                                                                   | A61N 1/39                                                                         | (33) United States of America                                        |
| (21) EP16740807.9                                                                                                                                | (11) EP3592419                                                                    | (51) A61N 1/40                                                       |
| (47) 07.07.2021                                                                                                                                  | (21) EP18708317.5                                                                 | (11) EP3656441                                                       |
| (87) US2016014438                                                                                                                                | (47) 14.07.2021                                                                   | (21) EP19219623.6                                                    |
| 28.07.2016                                                                                                                                       |                                                                                   | (47) 14.07.2021                                                      |
| (22) 22.01.2016                                                                                                                                  |                                                                                   |                                                                      |

|                                                                                                     |                                                                                                           |                                                                     |
|-----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| (22) 01.10.2003                                                                                     | (33) United States of America                                                                             | A61K 35/28                                                          |
| (54) APPARATUS FOR TREATING A TUMOR BY AN ELECTRIC FIELD                                            | (51) A61P 9/00                                                                                            | A61K 35/545                                                         |
| (73) Novocure GmbH                                                                                  | A61P 9/10                                                                                                 | (11) EP3492091                                                      |
| (72) PALTÍ, Yoram                                                                                   | A61K 35/12                                                                                                | (21) EP17834517.9                                                   |
| (31) 263329                                                                                         | A61K 35/14                                                                                                | (47) 14.07.2021                                                     |
| 285313                                                                                              | (11) EP3111945                                                                                            | (87) JP2017027383                                                   |
| 315576                                                                                              | (21) EP15754438.8                                                                                         | 01.02.2018                                                          |
| (32) 02.10.2002                                                                                     | (47) 14.07.2021                                                                                           | (22) 28.07.2017                                                     |
| 31.10.2002                                                                                          | (87) JP2015055547                                                                                         | (54) "MUSE" CELLS AS PROPHYLACTIC OR THERAPEUTIC AGENT FOR ANEURYSM |
| 10.12.2002                                                                                          | 03.09.2015                                                                                                |                                                                     |
| (33) United States of America                                                                       | (22) 26.02.2015                                                                                           | (73) Tohoku University                                              |
| United States of America                                                                            | (54) DENDRITIC CELLS FOR USE IN THE TREATMENT OF MYOCARDIAL INFARCTION                                    | Life Science Institute, Inc.                                        |
| United States of America                                                                            | (73) National University Corporation Hokkaido University                                                  | (72) SAIKI, Yoshikatsu                                              |
| (51) A61N 2/02                                                                                      | (72) TSUTSUI Hiroyuki                                                                                     | DEZAWA, Mari                                                        |
| (11) EP3212284                                                                                      | KINUGAWA Shintaro                                                                                         | HOSOYAMA, Katsuhiko                                                 |
| (21) EP15855445.1                                                                                   | ISHIMORI Naoki                                                                                            | (31) 2016150542                                                     |
| (47) 07.07.2021                                                                                     | SAITO Akimichi                                                                                            | (32) 29.07.2016                                                     |
| (87) US2015058617                                                                                   | (31) 2014036070                                                                                           | (33) Japan                                                          |
| 06.05.2016                                                                                          | (32) 26.02.2014                                                                                           | (51) A61P 11/00                                                     |
| (22) 02.11.2015                                                                                     | (33) Japan                                                                                                | (11) EP2970468                                                      |
| (54) METHOD AND APPARATUS FOR NON-CONTACT AXIAL PARTICLE ROTATION AND DECOUPLED PARTICLE PROPULSION | (51) A61P 9/00                                                                                            | (21) EP14714794.6                                                   |
| (73) Weinberg Medical Physics, Inc.                                                                 | A61P 13/12                                                                                                | (47) 07.07.2021                                                     |
| (72) MAIR, Lamar Odell                                                                              | A61P 25/28                                                                                                | (87) IB2014059627                                                   |
| NACEV, Aleksandar Nelson                                                                            | A61P 37/00                                                                                                | 18.09.2014                                                          |
| WEINBERG, Irving N.                                                                                 | C07D 209/08                                                                                               | (22) 11.03.2014                                                     |
| (31) 201462073360 P                                                                                 | C07D 231/56                                                                                               | (54) NOTCH2 BINDING MOLECULES FOR TREATING RESPIRATORY DISEASES     |
| (32) 31.10.2014                                                                                     | C07D 235/08                                                                                               | (73) Novartis AG                                                    |
| (33) United States of America                                                                       | C07D 239/70                                                                                               | (72) DANAHAY, Henry Luke                                            |
| (51) A61N 5/10                                                                                      | C07D 261/20                                                                                               | JAFFE, Aron Brandon                                                 |
| A61B 34/10                                                                                          | C07D 307/79                                                                                               | (31) 201361779195 P                                                 |
| A61B 90/00                                                                                          | C07D 307/81                                                                                               | 201361866273 P                                                      |
| (11) EP3720554                                                                                      | C07D 333/54                                                                                               | (32) 13.03.2013                                                     |
| (21) EP17821509.1                                                                                   | C07D 403/10                                                                                               | 15.08.2013                                                          |
| (47) 07.07.2021                                                                                     | C07D 405/12                                                                                               | (33) United States of America                                       |
| (87) EP2017081839                                                                                   | C07D 407/04                                                                                               | United States of America                                            |
| 13.06.2019                                                                                          | C07D 407/10                                                                                               | (51) A61P 17/02                                                     |
| (22) 07.12.2017                                                                                     | C07D 409/12                                                                                               | G01N 33/50                                                          |
| (54) PATIENT POSITIONING USING A SKELETON MODEL                                                     | C07D 471/04                                                                                               | C12N 5/0786                                                         |
| (73) Brainlab AG                                                                                    | C07D 487/04                                                                                               | A61K 35/15                                                          |
| (72) VEIGEL, Jochen                                                                                 | (11) EP3687506                                                                                            | (11) EP3245289                                                      |
| IVANOVSKA, Ivana                                                                                    | (21) EP19780738.1                                                                                         | (21) EP16737620.1                                                   |
| KAISER, Hagen                                                                                       | (47) 07.07.2021                                                                                           | (47) 07.07.2021                                                     |
| APONTE, Pablo                                                                                       | (87) US2019026054                                                                                         | (87) SG2016050018                                                   |
| (51) A61P 7/00                                                                                      | 10.10.2019                                                                                                | 21.07.2016                                                          |
| A61P 35/02                                                                                          | (22) 05.04.2019                                                                                           | (22) 18.01.2016                                                     |
| C07K 16/28                                                                                          | (54) SUBSTITUTED BENZOFURAN, BENZOPYRROLE, BENZOTHIOPHENE, AND STRUCTURALLY RELATED COMPLEMENT INHIBITORS | (54) DIFFERENTIATION OF MACROPHAGES FROM PLURIPOTENT STEM CELLS     |
| C12N 5/0789                                                                                         | (73) Biocryst Pharmaceuticals, Inc.                                                                       | (73) Agency for Science, Technology and Research                    |
| A61K 35/28                                                                                          | (72) KOTIAN, Pravin L.                                                                                    | (72) LIM, Hwei-In Shawn                                             |
| A61K 35/50                                                                                          | BABU, Yarlagaadda S.                                                                                      | HUBER, Tara                                                         |
| A61K 35/51                                                                                          | ZHANG, Weihe                                                                                              | GINHOX, Florent                                                     |
| (11) EP3097916                                                                                      | LU, Peng-Cheng                                                                                            | (31) 10201500366V                                                   |
| (21) EP16162911.8                                                                                   | WU, Minwan                                                                                                | (32) 16.01.2015                                                     |
| (47) 07.07.2021                                                                                     | LV, Wei                                                                                                   | (33) Singapore                                                      |
| (22) 11.04.2011                                                                                     | NGUYEN, Trung Xuan                                                                                        | (51) A61P 17/14                                                     |
| (54) COMPOSITIONS AND METHODS FOR PROVIDING HEMATOPOIETIC FUNCTION                                  | DANG, Zhao                                                                                                | A61Q 5/00                                                           |
| (73) Fred Hutchinson Cancer Research Center                                                         | CHINTAREDDY, Venkat R.                                                                                    | A61Q 7/00                                                           |
| (72) DELANEY, Colleen                                                                               | KUMAR, V. Satish                                                                                          | A61K 8/9794                                                         |
| BERNSTEIN, Irwin D.                                                                                 | RAMAN, Krishnan                                                                                           | (11) EP3434329                                                      |
| (31) 322575 P                                                                                       | (31) 201862654108 P                                                                                       | (21) EP18185026.4                                                   |
| (32) 09.04.2010                                                                                     | (32) 06.04.2018                                                                                           | (47) 14.07.2021                                                     |
|                                                                                                     | (33) United States of America                                                                             | (22) 23.07.2018                                                     |
|                                                                                                     | (51) A61P 9/10                                                                                            | (54) COSMETIC USE OF A TULIP EXTRACT ON HAIR                        |

|                                            |                                   |                                       |
|--------------------------------------------|-----------------------------------|---------------------------------------|
| (73) LABORATOIRE NATIVE                    | (33) China                        | (33) France                           |
| (72) BERNARD, Philippe                     | (51) A61P 35/00                   | (51) A62C 2/24                        |
| CHOULOT, Jean-Christophe                   | C07K 14/715                       | F16K 31/04                            |
| HAJEM, Neïla                               | C07K 16/24                        | F24F 13/14                            |
| HERLIN, Amélie                             | A61K 47/68                        | F24F 11/00                            |
| HIMBERT, Franck                            | (11) EP3455254                    | (11) EP3274636                        |
| (31) 1757098                               | (21) EP17724513.1                 | (21) EP15716622.4                     |
| (32) 26.07.2017                            | (47) 07.07.2021                   | (47) 14.07.2021                       |
| (33) France                                | (87) EP2017060870                 | (87) US2015021955                     |
| (51) A61P 27/02                            | 16.11.2017                        | 29.09.2016                            |
| (11) EP3353178                             | (22) 08.05.2017                   | (22) 23.03.2015                       |
| (21) EP16770917.9                          | (54) ANTIGEN BINDING MOLECULES    | (54) STORED ENERGY FOR FAILSAFE       |
| (47) 14.07.2021                            | COMPRISING A TNF FAMILY LIGAND    | VALVE                                 |
| (87) EP2016072347                          | TRIMER AND A TENASCIN BINDING     | (73) Siemens Industry, Inc.           |
| 30.03.2017                                 | MOIETY                            | (72) CHARLES, Donald E.               |
| (22) 21.09.2016                            | (73) F. Hoffmann-La Roche AG      | (51) A62C 13/00                       |
| (54) BICYCLIC COMPOUNDS AS DUAL            | (72) AMANN, Maria                 | A62C 35/02                            |
| ATX/CA INHIBITORS                          | BRUENKER, Peter                   | (11) EP3292887                        |
| (73) F. Hoffmann-La Roche AG               | CLAUS, Christina                  | (21) EP17184714.8                     |
| (72) DI GIORGIO, Patrick                   | FERRARA KOLLER, Claudia           | (47) 07.07.2021                       |
| HERT, Jérôme                               | GRAU-RICHARDS, Sandra             | (22) 03.08.2017                       |
| HUNZIKER, Daniel                           | KLEIN, Christian                  | (54) EXPULSION OF A FIRE              |
| MATTEI, Patrizio                           | LEVITSKI, Viktor                  | SUPPRESSANT FROM A CONTAINER          |
| RUDOLPH, Markus                            | MOESSNER, Ekkehard                | (73) The Boeing Company               |
| SCHMITZ, Petra                             | UMAÑA, Pablo                      | (72) WRIGHT, Robert S.                |
| ULLMER, Christoph                          | (31) 16169244                     | (31) 201615258726                     |
| (31) 15186633                              | (32) 11.05.2016                   | (32) 07.09.2016                       |
| (32) 24.09.2015                            | (33) European Patent Office (EPO) | (33) United States of America         |
| (33) European Patent Office (EPO)          | (51) A62B 1/10                    | (51) A62C 27/00                       |
| (51) A61P 31/00                            | B66D 1/74                         | A62C 31/02                            |
| C07H 3/06                                  | B66D 3/04                         | B05B 7/04                             |
| C07H 5/04                                  | (11) EP3181509                    | A62C 99/00                            |
| C07H 15/04                                 | (21) EP16196732.8                 | (11) EP3613470                        |
| A23L 33/00                                 | (47) 07.07.2021                   | (21) EP18891661.3                     |
| (11) EP2999358                             | (22) 27.02.2008                   | (47) 07.07.2021                       |
| (21) EP14800640.6                          | (54) POWERED ROPE ASCENDER AND    | (87) CN2018000073                     |
| (47) 07.07.2021                            | PORTABLE ROPE PULLING DEVICE      | 27.06.2019                            |
| (87) DK2014050142                          | (73) Atlas Devices, LLC           | (22) 12.02.2018                       |
| 27.11.2014                                 | (72) BALL, Nathan                 | (54) MULTI-FUNCTIONAL FIRE ENGINE     |
| (22) 22.05.2014                            | FOFONOFF, Timothy                 | USING LIQUID NITROGEN AS JET          |
| (54) SYNTHETIC MIXTURE OF                  | SCHMID, Bryan                     | POWER AND MIXING JETTING GUN          |
| OLIGOSACCHARIDES FOR THE                   | WALKER, Daniel                    | (73) Shandong Hongda Technology Group |
| TREATING A MICROBIOTA OF A                 | (31) 891779 P                     | Co., Ltd.                             |
| MAMMAL                                     | 37432                             | (72) ZHANG, Deli                      |
| (73) Glycom A/S                            | (32) 27.02.2007                   | JI, Yongxing                          |
| (72) DEKANY, Gyula                         | 26.02.2008                        | ZHANG, Liang                          |
| (31) 201370275                             | (33) United States of America     | XIE, Zhankun                          |
| (32) 22.05.2013                            | United States of America          | TAO, Lei                              |
| (33) Denmark                               | (51) A62C 2/06                    | YANG, He                              |
| (51) A61P 35/00                            | A62C 3/08                         | DUAN, Shengyang                       |
| C07K 14/00                                 | B64C 1/00                         | (31) 201711368271                     |
| C12N 15/113                                | B64C 1/40                         | (32) 18.12.2017                       |
| A61K 47/42                                 | B64D 45/00                        | (33) China                            |
| (11) EP3572421                             | D04H 1/4209                       | (51) A62C 31/02                       |
| (21) EP19169415.7                          | (11) EP3271243                    | F16L 25/14                            |
| (47) 14.07.2021                            | (21) EP16714778.4                 | (11) EP3359860                        |
| (22) 18.12.2014                            | (47) 14.07.2021                   | (21) EP16781184.3                     |
| (54) PEPTIDE, COMPLEX OF PEPTIDE AND       | (87) EP2016055742                 | (47) 14.07.2021                       |
| SIRNA AND USE THEREOF                      | 22.09.2016                        | (87) GB2016053129                     |
| (73) Positec Power Tools (Suzhou) Co., Ltd | (22) 16.03.2016                   | 13.04.2017                            |
| Chen, Pu                                   | (54) METHOD AND DEVICE FOR        | (22) 07.10.2016                       |
| (72) CHEN, Pu                              | FIREPROOFING A COMPOSITE          | (54) PIPELINE APPARATUS COMPRISING A  |
| CHU, Dafeng                                | MATERIAL PART                     | REDUCING BUSH                         |
| CHEN, Baoling                              | (73) Daher Aerospace              | (73) Rigdeluge Global Limited         |
| XU, Wen                                    | (72) SOUBELET, Dominique          | (72) GARDEN, Ian                      |
| PAN, Ran                                   | LANDAIS, Fabrice                  | (31) 201517761                        |
| (31) 201310698871                          | (31) 1552080                      | (32) 07.10.2015                       |
| (32) 18.12.2013                            | (32) 16.03.2015                   |                                       |

|                                    |                                    |                                   |
|------------------------------------|------------------------------------|-----------------------------------|
| (33) United Kingdom                | (51) A63B 21/00                    | A63B 71/02                        |
| (51) A62C 33/04                    | A63B 24/00                         | (11) EP3357549                    |
| B65H 54/58                         | (11) EP3407983                     | (21) EP18154854.6                 |
| (11) EP3209588                     | (21) EP17744638.2                  | (47) 14.07.2021                   |
| (21) EP15816080.4                  | (47) 14.07.2021                    | (22) 02.02.2018                   |
| (47) 07.07.2021                    | (87) RU2017000029                  | (54) MULTIFUNCTIONAL STRENGTH     |
| (87) EP2015002069                  | 03.08.2017                         | TRAINING APPARATUS                |
| 28.04.2016                         | (22) 24.01.2017                    | (73) Kusatz, Patrick              |
| (22) 20.10.2015                    | (54) WEIGHT EXERCISE MACHINE       | (72) Kusatz, Patrick              |
| (54) DEVICE FOR WINDING HOSES,     | (73) Slobodnik, Dmitriy Davidovich | (31) 102017102043                 |
| PREFERABLY FIRE-FIGHTING HOSES     | (72) Slobodnik, Dmitriy Davidovich | (32) 02.02.2017                   |
| (73) Wilhelm Barth GmbH + Co. KG   | (31) 2016102683                    | (33) Germany                      |
| Feuerwehrtechnik                   | (32) 27.01.2016                    | (51) A63B 24/00                   |
| (72) ERNST, Alexander              | (33) Russian Federation            | A63B 63/00                        |
| YONEDA, Toyohiko                   | (51) A63B 21/002                   | A63B 69/00                        |
| (31) 102014115361                  | (11) EP2195097                     | (11) EP3458168                    |
| (32) 22.10.2014                    | (21) EP08831856.3                  | (21) EP17799729.3                 |
| (33) Germany                       | (47) 14.07.2021                    | (47) 14.07.2021                   |
| (51) A63B 1/00                     | (87) US2008076551                  | (87) NO2017050123                 |
| A63B 9/00                          | 26.03.2009                         | 23.11.2017                        |
| A63B 17/04                         | (22) 16.09.2008                    | (22) 19.05.2017                   |
| A63B 21/00                         | (54) EXERCISE DEVICE HAVING A DOOR | (54) EXERCISE APPARATUS FOR BALL  |
| A63B 21/068                        | ANCHOR                             | GAME                              |
| A63B 21/16                         | (73) Fitness Anywhere, LLC.        | (73) Tecmaster AS                 |
| A63B 23/12                         | (72) HETRICK, Randal               | (72) RØYNESTAD, Tom Toralv        |
| (11) EP3459602                     | (31) 973111 P                      | ROB, Frank                        |
| (21) EP18000742.9                  | 948860                             | RØYNESTAD, Ole Tom                |
| (47) 07.07.2021                    | (32) 17.09.2007                    | (31) 20160842                     |
| (22) 19.09.2018                    | 30.11.2007                         | (32) 20.05.2016                   |
| (54) WALL BAR                      | (33) United States of America      | (33) Norway                       |
| (73) Schindler, Kurt               | United States of America           | (51) A63B 33/00                   |
| (72) Schindler, Kurt               | (51) A63B 21/005                   | G01C 21/20                        |
| (31) 3772017                       | A63B 21/008                        | (11) EP3009169                    |
| (32) 21.09.2017                    | A63B 21/015                        | (21) EP15188695.9                 |
| (33) Austria                       | A63B 21/22                         | (47) 07.07.2021                   |
| (51) A63B 21/00                    | A63B 22/00                         | (22) 07.10.2015                   |
| A63B 21/005                        | A63B 22/06                         | (54) ORIENTATION DURING SWIMMING  |
| A63B 21/22                         | A63B 71/06                         | (73) Polar Electro Oy             |
| A63B 22/00                         | (11) EP2944357                     | (72) Erkkilä, Mika                |
| A63B 22/06                         | (21) EP15164838.3                  | Määttä, Harri                     |
| A63B 24/00                         | (47) 14.07.2021                    | Puurunen, Jonna                   |
| A63B 71/06                         | (22) 23.04.2015                    | (31) 201414513902                 |
| (11) EP3341092                     | (54) SELECTABLE STRIDE ELLIPTICAL  | (32) 14.10.2014                   |
| (21) EP16762747.0                  | (73) Precor Incorporated           | (33) United States of America     |
| (47) 14.07.2021                    | (72) Arnold, Peter, J.             | (51) A63B 41/02                   |
| (87) EP2016070089                  | Birrell, James, S.                 | A63B 43/00                        |
| 02.03.2017                         | (31) 201461984727 P                | A63B 43/06                        |
| (22) 25.08.2016                    | 201462080299 P                     | A63B 69/00                        |
| (54) STATIONARY EXERCISE APPARATUS | 201514686390                       | A63B 71/06                        |
| FOR INDOOR CYCLING                 | (32) 25.04.2014                    | G09B 19/00                        |
| (73) Virtureal Development GmbH    | 15.11.2014                         | A63B 102/14                       |
| (72) ANDERSEN, Niels Kristian Skov | 14.04.2015                         | A63B 102/18                       |
| (31) 201500503                     | (33) United States of America      | (11) EP2779142                    |
| (32) 25.08.2015                    | United States of America           | (21) EP14160098.1                 |
| (33) Denmark                       | United States of America           | (47) 14.07.2021                   |
| (51) A63B 21/00                    | (51) A63B 21/055                   | (22) 14.03.2014                   |
| A63B 21/02                         | (11) EP3603753                     | (54) Basketball sensing apparatus |
| A63B 21/04                         | (21) EP19188269.5                  | (73) Wilson Sporting Goods Co.    |
| A63B 22/00                         | (47) 14.07.2021                    | (72) Thurman, Robert T.           |
| (11) EP3643368                     | (22) 25.07.2019                    | Krysiak, Kevin L.                 |
| (21) EP18202744.1                  | (54) SPORTS DEVICE                 | Proeber, David J.                 |
| (47) 14.07.2021                    | (73) Max Fitness GmbH              | Wagner, Allen G.                  |
| (22) 26.10.2018                    | (72) Zeller, Stefan                | Hohteri, Harri                    |
| (54) FITNESS EQUIPMENT             | Müller, Christian                  | Poropudas, Jirka                  |
| (73) Heartcore Fitness Ltd         | (31) 102018118825                  | Nieminen, Tuukka                  |
| (72) MILLER, Randolph F.           | (32) 02.08.2018                    | Makinen, Vesa-Matti               |
| SCHURING, Jess                     | (33) Germany                       | (31) 201361798738 P               |
| (51) A63B 21/16                    |                                    | 201361788304 P                    |

|                                    |                                     |                                          |
|------------------------------------|-------------------------------------|------------------------------------------|
| 201361799851 P                     | (72) ALMERAS, Lilian                | G06F 3/033                               |
| 201361800972 P                     | (31) 1350818                        | G06F 3/0346                              |
| 201361891487 P                     | 1363191                             | A63F 13/213                              |
| 201314071384                       | (32) 31.01.2013                     | A63F 13/215                              |
| 201414205073                       | 20.12.2013                          | A63F 13/24                               |
| 201414204880                       | (33) France                         | A63F 13/424                              |
| (32) 15.03.2013                    | France                              | A63F 13/428                              |
| 15.03.2013                         | (51) A63C 5/03                      | (11) EP2303422                           |
| 15.03.2013                         | A63C 11/00                          | (21) EP09755596.5                        |
| 15.03.2013                         | (11) EP3653277                      | (47) 07.07.2021                          |
| 16.10.2013                         | (21) EP19209134.6                   | (87) US2009042416                        |
| 04.11.2013                         | (47) 14.07.2021                     | 03.12.2009                               |
| 11.03.2014                         | (22) 14.11.2019                     | (22) 30.04.2009                          |
| 11.03.2014                         | (54) ADAPTER FOR ATTACHING A DEVICE | (54) DETERMINATION OF CONTROLLER         |
| (33) United States of America      | FOR HOLDING A USER ON A PAIR        | THREE-DIMENSIONAL LOCATION               |
| United States of America           | OF SKIS, AND SYSTEM COMPRISING      | USING IMAGE ANALYSIS AND                 |
| United States of America           | SUCH AN ADAPTER                     | ULTRASONIC COMMUNICATION                 |
| United States of America           | (73) Miranda Correia, Manuel        | (73) Sony Computer Entertainment America |
| United States of America           | (72) Miranda Correia, Manuel        | LLC                                      |
| United States of America           | (31) 1860486                        | (72) ZALEWSKI, Gary, M.                  |
| United States of America           | (32) 14.11.2018                     | (31) 145455                              |
| United States of America           | (33) France                         | 57783 P                                  |
| (51) A63B 63/00                    | (51) A63D 15/20                     | (32) 24.06.2008                          |
| A63B 69/40                         | G07F 17/38                          | 30.05.2008                               |
| A63B 71/02                         | A63F 13/211                         | (33) United States of America            |
| A63B 71/06                         | A63F 13/213                         | United States of America                 |
| A63B 102/02                        | A63F 13/285                         | (51) A63F 9/24                           |
| A63B 102/16                        | A63F 13/428                         | H04L 29/06                               |
| (11) EP3634590                     | A63F 13/573                         | G06Q 40/00                               |
| (21) EP18738007.6                  | A63F 13/65                          | G06F 21/41                               |
| (47) 07.07.2021                    | A63F 13/812                         | (11) EP3334505                           |
| (87) IT2018000075                  | (11) EP3378542                      | (21) EP16835656.6                        |
| 13.12.2018                         | (21) EP17188600.5                   | (47) 14.07.2021                          |
| (22) 18.05.2018                    | (47) 07.07.2021                     | (87) US2016045434                        |
| (54) SYSTEM FOR EXPELLING AND      | (22) 30.08.2017                     | 16.02.2017                               |
| COLLECTING BALLS AND RELATED       | (54) SYSTEM AND METHOD OF MODELING  | (22) 03.08.2016                          |
| OPERATING PROCESS                  | THE BEHAVIOR OF GAME ELEMENTS       | (54) METHOD AND DEVICE FOR               |
| (73) Spedaliere, Giuseppe          | DURING A REMOTE GAME                | MANAGING RESOURCES WITH AN               |
| (72) Spedaliere, Giuseppe          | (73) AO Kaspersky Lab               | EXTERNAL ACCOUNT                         |
| (31) 201700060992                  | (72) KASPERSKY, Eugene V.           | (73) Alibaba Group Holding Limited       |
| (32) 05.06.2017                    | CHIKOV, Alexey M.                   | (72) LIU, Boyang                         |
| (33) Italy                         | (31) 2017109813                     | LI, Jun                                  |
| (51) A63B 69/00                    | 201715669259                        | (31) 201510487834                        |
| (11) EP3624908                     | (32) 24.03.2017                     | 201615226336                             |
| (21) EP18725834.8                  | 04.08.2017                          | (32) 10.08.2015                          |
| (47) 07.07.2021                    | (33) Russian Federation             | 02.08.2016                               |
| (87) EP2018063063                  | United States of America            | (33) China                               |
| 22.11.2018                         | (51) A63F 1/10                      | United States of America                 |
| (22) 18.05.2018                    | A63F 1/14                           | (51) A63F 13/22                          |
| (54) CLIMBING HOLD WITH CAPACITIVE | B65C 11/00                          | A63F 13/355                              |
| DETECTION, AND CORRESPONDING       | B65H 1/06                           | A63F 13/42                               |
| MANUFACTURING METHOD AND           | B65H 35/00                          | A63F 13/79                               |
| CLIMBING WALL                      | G07F 17/42                          | (11) EP3077069                           |
| (73) X'Sin                         | (11) EP3668619                      | (21) EP14866878.3                        |
| (72) GARNIER, Denis                | (21) EP18758704.3                   | (47) 14.07.2021                          |
| RUL, Valentin                      | (47) 14.07.2021                     | (87) JP2014082347                        |
| (31) 1754398                       | (87) GB2018052299                   | 11.06.2015                               |
| (32) 18.05.2017                    | 21.02.2019                          | (22) 01.12.2014                          |
| (33) France                        | (22) 13.08.2018                     | (54) PROGRAM, RECORDING MEDIUM,          |
| (51) A63B 69/20                    | (54) TOY DEVICE FOR DISPENSING      | INFORMATION PROCESSING                   |
| (11) EP3441119                     | STACKABLE OR ROLLABLE               | APPARATUS, AND CONTROL METHOD            |
| (21) EP18190672.8                  | MATERIALS AND RELATED METHODS       | (73) Square Enix Holdings Co., Ltd.      |
| (47) 07.07.2021                    | (73) GW Development UK Limited      | (72) FORTIN, Jean-Francois F             |
| (22) 31.01.2014                    | (72) WAXKIRSH, Gavin                | TAIT, Alex                               |
| (54) REACTIVE MOBILITY TRAINING    | (31) 201713026                      | PERRIN, Cyril                            |
| APPARATUS COMPRISING A PUNCH       | (32) 14.08.2017                     | (31) 201361912608 P                      |
| BALL                               | (33) United Kingdom                 | (32) 06.12.2013                          |
| (73) Bellando de Castro, Antoine   | (51) A63F 9/24                      | (33) United States of America            |

|                                    |                                   |                                    |
|------------------------------------|-----------------------------------|------------------------------------|
| (51) A63G 7/00                     | F25B 39/02                        | 27.11.2017                         |
| A63G 21/20                         | F28D 9/00                         | (33) Japan                         |
| (11) EP3624911                     | F28F 3/08                         | Japan                              |
| (21) EP18731208.7                  | F28F 3/10                         | (51) B01D 15/08                    |
| (47) 07.07.2021                    | F28F 9/02                         | B01D 15/38                         |
| (87) NL2018050324                  | F28F 13/08                        | B01J 20/28                         |
| 22.11.2018                         | (11) EP3660437                    | B01J 20/286                        |
| (22) 16.05.2018                    | (21) EP18209140.5                 | B01J 20/289                        |
| (54) SUSPENDED ROLLERCOASTER       | (47) 14.07.2021                   | B01J 20/32                         |
| VEHICLE WITH ROTATIONAL            | (22) 29.11.2018                   | B32B 5/16                          |
| LOCKAGE                            | (54) A PLATE HEAT EXCHANGER AND   | G01N 33/566                        |
| (73) Vekoma Rides Engineering B.V. | A HEAT EXCHANGING PLATE FOR       | (11) EP3094390                     |
| (72) ROODENBURG, Hendrik Ficus     | TREATING A FEED SUCH AS SEA       | (21) EP15737823.3                  |
| VAN HEIJSTER, Arno Johannes        | WATER                             | (47) 07.07.2021                    |
| Petronella                         | (73) Alfa Laval Corporate AB      | (87) US2015011555                  |
| (31) 2018935                       | (72) BLOMGREN, Fredrik            | 23.07.2015                         |
| (32) 17.05.2017                    | (51) B01D 1/28                    | (22) 15.01.2015                    |
| (33) Netherlands                   | B01D 3/34                         | (54) AFFINITY CHROMATOGRAPHY MEDIA |
| (51) A63H 27/00                    | B01D 3/38                         | AND CHROMATOGRAPHY DEVICES         |
| B64C 13/18                         | C02F 1/04                         | (73) W.R. Grace & CO. - CONN.      |
| B64C 39/02                         | (11) EP3679999                    | REPLIGEN CORPORATION               |
| G05D 1/06                          | (21) EP19151001.5                 | (72) GU, Feng                      |
| (11) EP3552955                     | (47) 07.07.2021                   | CHODAVARAPU, Surya Kiran           |
| (21) EP19176060.2                  | (22) 09.01.2019                   | BOGDANOR, James                    |
| (47) 14.07.2021                    | (54) METHOD AND INSTALLATION FOR  | MCCREARY, Dennis                   |
| (22) 13.12.2013                    | PROCESSING A LIQUID               | PRYOR, James Neil                  |
| (54) METHODS FOR LAUNCHING AND     | (73) France EVAPORATION           | RUSCHE, James                      |
| LANDING AN UNMANNED AERIAL         | (72) DEHAY, ALAIN                 | PEYSER, James                      |
| VEHICLE                            | CARDINAUD, ARNAUD                 | PAULY, Thomas                      |
| (73) SZ DJI Technology Co., Ltd.   | (51) B01D 3/14                    | (31) 201461928242 P                |
| (72) Wang, Ming-yu                 | (11) EP3449990                    | (32) 16.01.2014                    |
| (51) A63J 5/00                     | (21) EP17789721.2                 | (33) United States of America      |
| F21S 10/00                         | (47) 14.07.2021                   | (51) B01D 15/20                    |
| H04L 29/08                         | (87) JP2017016973                 | B01D 15/34                         |
| G06F 21/35                         | 02.11.2017                        | B01D 15/36                         |
| H04W 12/00                         | (22) 28.04.2017                   | B01D 15/38                         |
| (11) EP3624423                     | (54) SEPARATING DEVICE            | B01J 20/24                         |
| (21) EP18798234.3                  | (73) IHI Corporation              | B01J 20/28                         |
| (47) 07.07.2021                    | (72) SATO, Naoki                  | B01J 20/285                        |
| (87) KR2018005240                  | NAKANO, Kunihiko                  | B01J 20/291                        |
| 15.11.2018                         | YOSHINOYA, Takuya                 | G01N 27/447                        |
| (22) 08.05.2018                    | LIU, Yuping                       | (11) EP2794051                     |
| (54) CROWD CONTROL SYSTEM FOR      | NAKAYAMA, Ryutaro                 | (21) EP12815723.7                  |
| CONTROLLING PLURALITY OF USER      | (31) 2016090602                   | (47) 07.07.2021                    |
| TERMINALS                          | (32) 28.04.2016                   | (87) FI2012051263                  |
| (73) Fanlight Co., Ltd.            | (33) Japan                        | 27.06.2013                         |
| (72) SONG, Ho Lim                  | (51) B01D 15/00                   | (22) 18.12.2012                    |
| CHOI, Jung Min                     | B01J 20/26                        | (54) USE OF STATIONARY PHASE       |
| (31) 20170058986                   | C07K 2/00                         | COMPRISING FIBRIL CELLULOSE IN     |
| (32) 12.05.2017                    | G01N 30/00                        | SEPARATION METHODS                 |
| (33) Korea (Republic)              | G01N 30/88                        | (73) UPM-Kymmene Corporation       |
| (51) A63J 5/02                     | (11) EP3650456                    | (72) LAURAEUS, Marko               |
| A63J 7/00                          | (21) EP18872893.5                 | LAUKKANEN, Antti                   |
| H05B 45/20                         | (47) 07.07.2021                   | (31) 20116317                      |
| H05B 47/105                        | (87) JP2018040499                 | (32) 22.12.2011                    |
| H05B 47/155                        | 09.05.2019                        | (33) Finland                       |
| (11) EP3446763                     | (22) 31.10.2018                   | (51) B01D 15/20                    |
| (21) EP18475504.9                  | (54) PURIFICATION AGENT FOR SUGAR | B01J 20/34                         |
| (47) 07.07.2021                    | CHAIN OR GLYCOPEPTIDE, AND USE    | C07K 1/16                          |
| (22) 14.08.2018                    | THEREOF                           | G01N 30/50                         |
| (54) GRAPHIC IMAGING DEVICE        | (73) Sumitomo Bakelite Co., Ltd.  | (11) EP2931400                     |
| (73) Safestuffs group, s.r.o.      | (72) TOYODA, Masaaki              | (21) EP13862375.6                  |
| (72) Slovák, Igor                  | MATSUMOTO, Takayuki               | (47) 07.07.2021                    |
| (31) 500592017                     | SAKAGUCHI, Midori                 | (87) SE2013051493                  |
| (32) 24.08.2017                    | KATAYAMA, Takahiro                | 19.06.2014                         |
| (33) Slovakia                      | (31) 2017210150                   | (22) 12.12.2013                    |
| (51) B01D 1/22                     | 2017227180                        | (54) METHOD FOR CLEANING OF PACKED |
| C02F 1/00                          | (32) 31.10.2017                   | BED CHROMATOGRAPHY COLUMNS         |

|                                       |                                           |                                     |
|---------------------------------------|-------------------------------------------|-------------------------------------|
| (73) Cytiva BioProcess R&D AB         | (32) 29.09.2017                           | (54) CHARGED ENGINEERED POLYMER     |
| (72) LACKI, Karol                     | (33) United States of America             | BEADS/BUBBLES FUNCTIONALIZED        |
| JOHANSSON, Hans, J.                   | (51) B01D 19/00                           | WITH MOLECULES FOR ATTRACTING       |
| (31) 1251422                          | B01D 35/00                                | AND ATTACHING TO MINERAL            |
| (32) 14.12.2012                       | B04C 9/00                                 | PARTICLES OF INTEREST FOR           |
| (33) Sweden                           | E02F 3/28                                 | FLOTATION SEPARATION                |
| (51) B01D 15/38                       | E02F 9/08                                 | (73) Cidra Corporate Services, Inc. |
| B01J 39/26                            | E02F 9/22                                 | Davis, Albert Michael               |
| C07K 1/22                             | F15B 1/26                                 | (72) Davis, Michael A.              |
| C07K 16/06                            | F15B 21/04                                | (31) 201261650210 P                 |
| (11) EP3172221                        | (11) EP3201479                            | (32) 22.05.2012                     |
| (21) EP15750182.6                     | (21) EP14903107.2                         | (33) United States of America       |
| (47) 07.07.2021                       | (47) 07.07.2021                           | (51) B01D 21/01                     |
| (87) US2015041936                     | (87) SE2014000121                         | C02F 1/52                           |
| 04.02.2016                            | 07.04.2016                                | C02F 1/56                           |
| (22) 24.07.2015                       | (22) 01.10.2014                           | C02F 101/14                         |
| (54) PURIFICATION PLATFORM FOR        | (54) A HYDRAULIC FLUID TANK               | C02F 101/20                         |
| BISPECIFIC ANTIBODIES                 | ARRANGEMENT                               | C02F 101/22                         |
| (73) Regeneron Pharmaceuticals, Inc.  | (73) Volvo Construction Equipment AB      | (11) EP3278854                      |
| (72) TUSTIAN, Andrew                  | (72) VIGHOLM, Bo                          | (21) EP16772316.2                   |
| ENDICOTT, Christine                   | (51) B01D 19/02                           | (47) 07.07.2021                     |
| ADAMS, Benjamin                       | B01D 29/19                                | (87) JP2016058410                   |
| MATTILA, John                         | B41J 2/175                                | 06.10.2016                          |
| BAK, Hanne                            | B41J 2/19                                 | (22) 16.03.2016                     |
| (31) 201462029463 P                   | (11) EP3436174                            | (54) WATER-PURIFYING AGENT AND      |
| (32) 26.07.2014                       | (21) EP16908976.0                         | WATER PURIFICATION METHOD           |
| (33) United States of America         | (47) 07.07.2021                           | (73) Dexerials Corporation          |
| (51) B01D 17/04                       | (87) US2016041712                         | (72) ITO, Masahiko                  |
| C09K 8/584                            | 18.01.2018                                | SHIMADA, Ryu                        |
| C09K 8/588                            | (22) 11.07.2016                           | FUJITA, Takanori                    |
| C10G 33/04                            | (54) FROTH COALESCING                     | (31) 2015069266                     |
| C11D 1/00                             | (73) Hewlett-Packard Development Company, | (32) 30.03.2015                     |
| (11) EP3655127                        | L.P.                                      | (33) Japan                          |
| (21) EP18723543.7                     | (72) STUDER, Anthony                      | (51) B01D 21/01                     |
| (47) 07.07.2021                       | WICKWIRE, Robert                          | C02F 1/56                           |
| (87) EP2018062764                     | (51) B01D 19/04                           | C02F 101/20                         |
| 24.01.2019                            | D21C 3/28                                 | (11) EP3278853                      |
| (22) 16.05.2018                       | D21H 21/12                                | (21) EP16772140.6                   |
| (54) DEMULSIFIERS AND A METHOD        | (11) EP3233233                            | (47) 07.07.2021                     |
| OF USING DEMULSIFIERS FOR             | (21) EP15825800.4                         | (87) JP2016057241                   |
| BREAKING EMULSIONS OF WATER           | (47) 14.07.2021                           | 06.10.2016                          |
| AND CRUDE OIL                         | (87) FI2015050895                         | (22) 08.03.2016                     |
| (73) Clariant International Ltd       | 23.06.2016                                | (54) WATER CLEANING METHOD          |
| Clariant S.A.                         | (22) 17.12.2015                           | (73) Dexerials Corporation          |
| (72) DE OLIVEIRA FILHO, Antonio Pedro | (54) DEFOAMING COMPOSITIONS               | (72) NAKAMURA, Masayuki             |
| TOOGE, Carlos Augusto Blasques        | COMPRISING AMPHIPHILIC                    | SHIMADA, Ryu                        |
| NOGUEIRA, Thiago                      | PARTICLES AND METHODS OF USING            | FUJITA, Takanori                    |
| BASSO, Everton                        | THE SAME                                  | KIMURA, Kazuhiro                    |
| DA SILVA, Sergio Costa                | (73) Kemira Oyj                           | HASEGAWA, Masato                    |
| MAGATON, Carlos Alberto               | (72) KIRWAN, Carter                       | (31) 2015069281                     |
| KRULL, Matthias                       | HAMM, Rebecca                             | (32) 30.03.2015                     |
| (31) 17182331                         | (31) 201462094173 P                       | (33) Japan                          |
| (32) 20.07.2017                       | (32) 19.12.2014                           | (51) B01D 27/08                     |
| (33) European Patent Office (EPO)     | (33) United States of America             | B01D 35/30                          |
| (51) B01D 17/04                       | (51) B01D 21/00                           | F02M 37/22                          |
| C10G 31/08                            | B03C 1/01                                 | (11) EP2598742                      |
| (11) EP3687653                        | B03C 1/28                                 | (21) EP11813246.3                   |
| (21) EP18786594.4                     | B03C 1/30                                 | (47) 14.07.2021                     |
| (47) 07.07.2021                       | B03C 5/00                                 | (87) US2011045891                   |
| (87) US2018053047                     | B03C 5/02                                 | 02.02.2012                          |
| 04.04.2019                            | B03D 1/02                                 | (22) 29.07.2011                     |
| (22) 27.09.2018                       | (11) EP2852465                            | (54) NO FILTER NO RUN FILTER        |
| (54) CONSERVING FRESH WASH WATER      | (21) EP13794696.8                         | ASSEMBLY WITH AIR VENT              |
| USAGE IN DESALTING CRUDE OIL          | (47) 07.07.2021                           | (73) Cummins Filtration IP, Inc.    |
| (73) Saudi Arabian Oil Company        | (87) US2013042202                         | (72) ABDALLA, Wasseem               |
| (72) KOLESHWAR, Vilas S.              | 28.11.2013                                | BURGAN, Eric, R.                    |
| ALBLUWI, Saif F.                      | (22) 22.05.2013                           | MALGORN, Gerard                     |
| (31) 201715719884                     |                                           | (31) 369488 P                       |

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|---------------------------------------|------------------------------------|-----------------------------------|
| (32) 30.07.2010                       | (54) VACUUM AND/OR PRESSURE        | United States of America          |
| (33) United States of America         | FILTRATION DEVICE FOR FILTERING A  | (51) B01D 35/143                  |
| (51) B01D 29/21                       | SUSPENSION                         | G01N 33/28                        |
| B01D 29/52                            | (73) ANDRITZ Separation GmbH       | (11) EP3542158                    |
| B01D 29/54                            | (72) KNOBLOCH, Wolfgang            | (21) EP17863307.9                 |
| B01D 29/90                            | SCHERER, Dieter                    | (47) 07.07.2021                   |
| B01D 36/00                            | (51) B01D 33/23                    | (87) US2017059905                 |
| (11) EP2890472                        | (11) EP3664910                     | 12.07.2018                        |
| (21) EP13745821.2                     | (21) EP18733213.5                  | (22) 03.11.2017                   |
| (47) 07.07.2021                       | (47) 07.07.2021                    | (54) SENSING SYSTEM FOR DETECTING |
| (87) EP2013066181                     | (87) EP2018065916                  | MACHINE FLUID DEGRADATION         |
| 06.03.2014                            | 14.02.2019                         | (73) Caterpillar Inc.             |
| (22) 01.08.2013                       | (22) 15.06.2018                    | (72) SPENGLER, Philip C.          |
| (54) FILTER ELEMENT AND FILTER DEVICE | (54) DISC FILTER                   | RIES, Jeffrey R.                  |
| (73) MANN+HUMMEL GmbH                 | (73) Voith Patent GmbH             | ABI-AKAR, Hind                    |
| (72) KOCKSCH, Christian               | (72) GOMMEL, Axel                  | (31) 201615355576                 |
| (31) 102012017140                     | NUSSBAUMER, Markus                 | (32) 18.11.2016                   |
| (32) 30.08.2012                       | (31) 102017118050                  | (33) United States of America     |
| (33) Germany                          | (32) 09.08.2017                    | (51) B01D 35/153                  |
| (51) B01D 29/21                       | (33) Germany                       | B01D 35/16                        |
| B01D 35/16                            | (51) B01D 35/02                    | (11) EP3463612                    |
| B01D 35/30                            | B01D 35/05                         | (21) EP17723398.8                 |
| B01D 46/00                            | B08B 1/00                          | (47) 07.07.2021                   |
| B01D 46/24                            | E03B 3/00                          | (87) EP2017061608                 |
| F01M 13/04                            | E03B 7/07                          | 14.12.2017                        |
| (11) EP2654921                        | E03F 1/00                          | (22) 15.05.2017                   |
| (21) EP11815826.0                     | F16K 1/00                          | (54) FILTER DEVICE                |
| (47) 07.07.2021                       | (11) EP3736032                     | (73) Mahle International GmbH     |
| (87) US2011066598                     | (21) EP19173398.9                  | (72) BRAUNHEIM, Michael           |
| 28.06.2012                            | (47) 07.07.2021                    | (31) 102016209919                 |
| (22) 21.12.2011                       | (22) 08.05.2019                    | (32) 06.06.2016                   |
| (54) CRANKCASE VENTILATION FILTER     | (54) PIPE FITTINGS WITH FILTER     | (33) Germany                      |
| ASSEMBLY AND FILTER CARTRIDGE         | (73) Yuan Mei Corp.                | (51) B01D 39/08                   |
| THEREFOR                              | (72) Huang, Wei-Kai                | B01D 39/16                        |
| (73) Donaldson Company, Inc.          | (51) B01D 35/02                    | (11) EP3700654                    |
| (72) KLEYNEN, Christof                | B01D 35/28                         | (21) EP18782152.5                 |
| (31) 201061425869 P                   | G21D 1/02                          | (47) 07.07.2021                   |
| (32) 22.12.2010                       | (11) EP2875853                     | (87) GB2018052756                 |
| (33) United States of America         | (21) EP14184798.8                  | 02.05.2019                        |
| (51) B01D 29/78                       | (47) 14.07.2021                    | (22) 27.09.2018                   |
| B08B 3/04                             | (22) 14.11.2005                    | (54) FILTER MEDIA                 |
| B08B 7/02                             | (54) Finned strainer               | (73) Dyson Technology Limited     |
| C02F 1/00                             | (73) ATOMIC ENERGY OF CANADA       | (72) MORRIS, Gareth               |
| C02F 103/24                           | LIMITED                            | MCMANUS, James                    |
| C14C 15/00                            | (72) Rhodes, David Bruce           | HOVELL, Benjamin                  |
| (11) EP3443129                        | McGregor, James Edward Allan       | (31) 201717759                    |
| (21) EP17718601.2                     | (31) 2487584                       | (32) 28.10.2017                   |
| (47) 14.07.2021                       | (32) 15.11.2004                    | (33) United Kingdom               |
| (87) GB2017051051                     | (33) Canada                        | (51) B01D 39/16                   |
| 19.10.2017                            | (51) B01D 35/027                   | B01D 53/02                        |
| (22) 13.04.2017                       | C12M 1/12                          | B01D 53/04                        |
| (54) ANIMAL SKIN SUBSTRATE            | (11) EP3345669                     | B01D 53/40                        |
| TREATMENT METHOD AND                  | (21) EP18153891.9                  | B01D 53/82                        |
| APPARATUS                             | (47) 14.07.2021                    | B01J 20/26                        |
| (73) Xeros Limited                    | (22) 24.09.2012                    | B01J 20/28                        |
| (72) ASHFAQ, Mohammed                 | (54) FILTER SYSTEMS FOR SEPERATING | B01J 20/30                        |
| STEWART, Anthony                      | MISCROCARRIERS FROM CELL           | B01J 20/32                        |
| SAWFORD, Michael David                | CULTURE SOLUTIONS                  | C08F 212/08                       |
| (31) 201606404                        | (73) Life Technologies Corporation | C08F 212/36                       |
| (32) 13.04.2016                       | (72) LARSEN, Jeremy K.             | C08F 222/06                       |
| (33) United Kingdom                   | COLEMAN, Jon Q.                    | (11) EP3429725                    |
| (51) B01D 33/067                      | ROWLEY, David S.                   | (21) EP17767216.9                 |
| B01D 33/09                            | (31) 201161540967 P                | (47) 07.07.2021                   |
| B01D 33/74                            | 201213449101                       | (87) US2017021850                 |
| (11) EP3578242                        | (32) 29.09.2011                    | 21.09.2017                        |
| (21) EP18175993.7                     | 17.04.2012                         | (22) 10.03.2017                   |
| (47) 07.07.2021                       | (33) United States of America      |                                   |
| (22) 05.06.2018                       |                                    |                                   |



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| (54) AIR FILTERS COMPRISING<br>POLYMERIC SORBENTS FOR<br>REACTIVE GASES                                                                                                                 | B01D 46/10<br>B01D 46/52<br>(11) EP3646933                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | (54) METHOD AND DEVICE FOR<br>CONDENSING A CARBON DIOXIDE-<br>RICH GAS STREAM                                                                                                                                                                                                                                                                                                                             |
| (73) 3M Innovative Properties Company                                                                                                                                                   | (21) EP19205778.4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | (73) L'Air Liquide Société Anonyme pour<br>l'Etude et l'Exploitation des Procédés                                                                                                                                                                                                                                                                                                                         |
| (72) MAANUM, Derek M.<br>WENDLAND, Michael S.<br>KOBÉ, Michael W.<br>GROTH, Austin D.<br>RAKOW, Neal A.                                                                                 | (47) 14.07.2021<br>(22) 29.10.2019<br>(54) A COVER FOR FILTERING ELEMENT<br>(73) DENSO THERMAL SYSTEMS S.p.A.<br>(72) BALZO, Michele<br>NICOLE', Fabrizio                                                                                                                                                                                                                                                                                                                                                                                                                           | (72) DARDE, Arthur<br>(31) 1252262<br>(32) 13.03.2012<br>(33) France                                                                                                                                                                                                                                                                                                                                      |
| (31) 201662307831 P<br>201762465209 P<br>201762465214 P                                                                                                                                 | (31) 201800009906<br>(32) 30.10.2018<br>(33) Italy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (51) B01D 53/02<br>B01D 53/04<br>B01D 53/047<br>B01J 20/20<br>B01J 20/28<br>B01J 20/30<br>B01J 20/32<br>C01B 32/05<br>C01B 32/306                                                                                                                                                                                                                                                                         |
| (32) 14.03.2016<br>01.03.2017<br>01.03.2017                                                                                                                                             | (51) B01D 46/00<br>B01D 46/10<br>B01D 46/52<br>B60H 3/06                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | (11) EP3356028<br>(21) EP16767119.7<br>(47) 07.07.2021<br>(87) US2016050695<br>06.04.2017<br>(22) 08.09.2016<br>(54) METHOD OF PREPARING CARBON<br>MOLECULAR SIEVE ADSORBENTS<br>FROM ACTIVATED CARBON AND A<br>POLYMER                                                                                                                                                                                   |
| (33) United States of America<br>United States of America<br>United States of America                                                                                                   | (11) EP3586939<br>(21) EP19191888.7<br>(47) 07.07.2021<br>(22) 08.07.2013<br>(54) AIR FILTER FOR THE INDOOR<br>AIR OF CABINS OF VEHICLES,<br>AGRICULTURAL, CONSTRUCTION<br>AND WORKING MACHINES<br>(73) MANN+HUMMEL GmbH<br>(72) STINZENDÖRFER, Joachim<br>GOHLE, Angelika<br>HANDSTEIN, Michael                                                                                                                                                                                                                                                                                    | (73) Dow Global Technologies LLC<br>(72) LIU, Junqiang<br>HAN, Chan<br>GOSS, Janet M.<br>CALVERLEY, Edward M.                                                                                                                                                                                                                                                                                             |
| (51) B01D 39/16<br>B01D 71/68<br>C08J 9/26                                                                                                                                              | (31) 102012013671<br>(32) 11.07.2012<br>(33) Germany                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (31) 201562234701 P<br>(32) 30.09.2015<br>(33) United States of America                                                                                                                                                                                                                                                                                                                                   |
| (11) EP3489289<br>(21) EP17834339.8<br>(47) 14.07.2021<br>(87) JP2017026910<br>01.02.2018<br>(22) 25.07.2017<br>(54) POROUS POLYETHER SULFONE<br>FILM AND PRODUCTION METHOD<br>THEREFOR | (51) B01D 46/24<br>B01D 63/08<br>B01D 69/10<br>G01N 15/00<br>(11) EP2864010<br>(21) EP13744826.2<br>(47) 07.07.2021<br>(87) IB2013054807<br>03.01.2014<br>(22) 12.06.2013<br>(54) FILTRATION ASSEMBLY COMPRISING<br>A FILTER AND A FILTER SUPPORT<br>AND ASSOCIATED METHOD FOR<br>THE COLLECTION AND ANALYSIS OF<br>NANOPARTICLES<br>(73) Commissariat à l'Énergie Atomique et<br>aux Énergies Alternatives<br>Institut Technique des Gaz et de l'Air<br>(72) CLAVAGUERA, Simon<br>DECOLIN, Eric<br>GUIOT, Arnaud<br>HEBERT, Guillaume<br>JACQUINOT, Sébastien<br>MOTELLIER, Sylvie | (51) B01D 53/02<br>B01J 20/18<br>B01J 29/08<br>C01B 39/24<br>(11) EP2527296<br>(21) EP12168953.3<br>(47) 07.07.2021<br>(22) 22.05.2012<br>(54) Adhesive-free zeolithic granulate with<br>faujasite structure and method for<br>producing such an adhesive-free zeolithic<br>granulate and use of same<br>(73) Chemiewerk Bad Köstritz GmbH<br>(72) Gleichmann, Kristin<br>Brandt, Alfons<br>Unger, Baldur |
| (73) UBE Industries, Ltd.<br>(72) OHYA, Shusei<br>MATSUO, Makoto<br>BAMBA, Keita                                                                                                        | (31) 102012013671<br>(32) 11.07.2012<br>(33) Germany                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (31) 102011103149<br>(32) 25.05.2011<br>(33) Germany                                                                                                                                                                                                                                                                                                                                                      |
| (31) 2016145753<br>(32) 25.07.2016<br>(33) Japan                                                                                                                                        | (51) B01D 46/00<br>B01D 46/10<br>B01D 46/42<br>B01D 46/44<br>B01D 46/52<br>(11) EP3496837<br>(21) EP17840056.0<br>(47) 07.07.2021<br>(87) US2017045492<br>15.02.2018<br>(22) 04.08.2017<br>(54) AIR FILTER CONDITION SENSING<br>(73) 3M Innovative Properties Company<br>(72) ARTHUR, Jonathan B.<br>BLOEDORN, Karl W.<br>CHAKRAVARTY, Jayant<br>PORTELLI, Gene B.<br>GLASS, Dennis M.<br>MEIS, Michael A.<br>LUPPES, Lyle L.<br>HENNEN, Daniel W.<br>FLETCHER, Douglas D.<br>HEMBERG, Eric O.<br>HEMBERG, Oscar M.                                                                 | (51) B01D 53/02<br>B01J 20/18<br>B01J 29/08<br>C01B 39/24<br>(11) EP2527296<br>(21) EP12168953.3<br>(47) 07.07.2021<br>(22) 22.05.2012<br>(54) Adhesive-free zeolithic granulate with<br>faujasite structure and method for<br>producing such an adhesive-free zeolithic<br>granulate and use of same<br>(73) Chemiewerk Bad Köstritz GmbH<br>(72) Gleichmann, Kristin<br>Brandt, Alfons<br>Unger, Baldur |
| (31) 201662372156 P<br>201662374040 P                                                                                                                                                   | (31) 1255785<br>(32) 20.06.2012<br>(33) France                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | (31) 102011103149<br>(32) 25.05.2011<br>(33) Germany                                                                                                                                                                                                                                                                                                                                                      |
| (32) 08.08.2016<br>12.08.2016                                                                                                                                                           | (51) B01D 53/00<br>F25J 3/02<br>(11) EP2893276<br>(21) EP13715268.2<br>(47) 14.07.2021<br>(87) FR2013050468<br>19.09.2013<br>(22) 05.03.2013                                                                                                                                                                                                                                                                                                                                                                                                                                        | (51) B01D 53/04<br>B01D 53/26<br>B60T 17/00<br>(11) EP3237094<br>(21) EP15774503.5<br>(47) 07.07.2021<br>(87) EP2015001767<br>30.06.2016<br>(22) 02.09.2015<br>(54) DEVICE FOR ATTENUATING AN<br>EXHAUST-GAS NOISE, SYSTEM<br>COMPRISING A DEVICE OF SAID                                                                                                                                                 |
| (33) United States of America<br>United States of America                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                           |
| (51) B01D 46/00                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                           |

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|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TYPE, SORPTION DRYER HAVING A<br>DEVICE OF SAID TYPE, AND METHOD<br>FOR ATTENUATING AN EXHAUST-GAS<br>NOISE      | INGRAM, Thomas<br>REINER, Virginia<br>PEREIRA, Carla<br>SISKIN, Michael | FILTER IN A HOUSING OF A FUME<br>HOOD APPARATUS                                                                                                                       |
| (73) Donaldson Filtration Deutschland GmbH                                                                       | (31) 17171012                                                           | (73) Bruckbauer, Wilhelm                                                                                                                                              |
| (72) WALDSCHMIDT-SCHROER, Sylke                                                                                  | (32) 15.05.2017                                                         | (72) IMMERZ, Anja                                                                                                                                                     |
| AMTMANN, Till                                                                                                    | (33) European Patent Office (EPO)                                       | GÖSSLER, Siegfried                                                                                                                                                    |
| (31) 102014018932                                                                                                | (51) B01D 53/14                                                         | (31) 102016202293                                                                                                                                                     |
| (32) 22.12.2014                                                                                                  | F01K 7/18                                                               | (32) 15.02.2016                                                                                                                                                       |
| (33) Germany                                                                                                     | (11) EP2508245                                                          | (33) Germany                                                                                                                                                          |
| (51) B01D 53/04                                                                                                  | (21) EP12163240.0                                                       | (51) B01D 53/62                                                                                                                                                       |
| F03G 3/08                                                                                                        | (47) 07.07.2021                                                         | (11) EP2974784                                                                                                                                                        |
| F04B 37/08                                                                                                       | (22) 04.04.2012                                                         | (21) EP15180709.6                                                                                                                                                     |
| F16C 32/04                                                                                                       | (54) Carbon dioxide recovery system and<br>method                       | (47) 14.07.2021                                                                                                                                                       |
| F16F 15/31                                                                                                       | (73) MITSUBISHI HEAVY INDUSTRIES<br>ENGINEERING, LTD.                   | (22) 25.08.2011                                                                                                                                                       |
| H01F 6/04                                                                                                        | (72) Iijima, Masaki                                                     | (54) OPERATION CONTROL METHOD OF<br>CO2 RECOVERING APPARATUS                                                                                                          |
| (11) EP3204644                                                                                                   | (31) 2011084929                                                         | (73) Mitsubishi Heavy Industries Engineering,<br>Ltd.                                                                                                                 |
| (21) EP15774918.5                                                                                                | (32) 06.04.2011                                                         | (72) Nakagawa, Yosuke                                                                                                                                                 |
| (47) 14.07.2021                                                                                                  | (33) Japan                                                              | (31) 2011042961                                                                                                                                                       |
| (87) EP2015072895                                                                                                | (51) B01D 53/22                                                         | (32) 28.02.2011                                                                                                                                                       |
| 14.04.2016                                                                                                       | B01D 53/26                                                              | (33) Japan                                                                                                                                                            |
| (22) 05.10.2015                                                                                                  | B01D 61/36                                                              | (51) B01D 53/62                                                                                                                                                       |
| (54) DEVICE FOR IMPROVING THE<br>VACUUM IN THE HOUSING OF A<br>MACHINE                                           | B01D 69/02                                                              | B01D 53/83                                                                                                                                                            |
| (73) Messer Industriegase GmbH                                                                                   | B01D 69/06                                                              | B01D 53/96                                                                                                                                                            |
| Messer Group GmbH                                                                                                | B01D 69/10                                                              | (11) EP3311904                                                                                                                                                        |
| (72) KUTZ, Thomas                                                                                                | B01D 71/36                                                              | (21) EP17197131.0                                                                                                                                                     |
| HERZOG, Friedhelm                                                                                                | B01D 71/38                                                              | (47) 07.07.2021                                                                                                                                                       |
| (31) 102014015172                                                                                                | (11) EP3088072                                                          | (22) 18.10.2017                                                                                                                                                       |
| (32) 10.10.2014                                                                                                  | (21) EP14873489.0                                                       | (54) SYSTEM AND METHOD FOR<br>REDUCING CARBON DIOXIDE<br>EMISSIONS FROM A FLUE GAS<br>BY MEANS OF A CARBONATOR/<br>CALCINER AND USING HEAT-<br>TRANSFERRING PARTICLES |
| (33) Germany                                                                                                     | (47) 07.07.2021                                                         | (73) General Electric Technology GmbH                                                                                                                                 |
| (51) B01D 53/06                                                                                                  | (87) JP2014081224                                                       | (72) STALLMANN, Olaf                                                                                                                                                  |
| (11) EP3501621                                                                                                   | 02.07.2015                                                              | (31) 201615298350                                                                                                                                                     |
| (21) EP16885454.5                                                                                                | (22) 26.11.2014                                                         | (32) 20.10.2016                                                                                                                                                       |
| (47) 14.07.2021                                                                                                  | (54) MOISTURE PERMEABLE FILTER<br>MEDIUM                                | (33) United States of America                                                                                                                                         |
| (87) JP2016073989                                                                                                | (73) Nitto Denko Corporation                                            | (51) B01D 53/62                                                                                                                                                       |
| 22.02.2018                                                                                                       | (72) UCHIYAMA, Shihō                                                    | C01B 3/34                                                                                                                                                             |
| (22) 17.08.2016                                                                                                  | (31) 2013272760                                                         | C01B 3/56                                                                                                                                                             |
| (54) ABSORPTION ROTOR<br>AND ABSORPTION ROTOR<br>MANUFACTURING METHOD                                            | (32) 27.12.2013                                                         | C10J 3/00                                                                                                                                                             |
| (73) Nichias Corporation                                                                                         | (33) Japan                                                              | H01M 16/00                                                                                                                                                            |
| (72) CHIGIRA, Yusuke                                                                                             | (51) B01D 53/26                                                         | H01M 8/04007                                                                                                                                                          |
| YAMASHITA, Katsuhiko                                                                                             | E03B 3/28                                                               | H01M 8/06                                                                                                                                                             |
| DEGUCHI, Tomohiro                                                                                                | F24S 21/00                                                              | H01M 8/0612                                                                                                                                                           |
| TSUZAKI, Masahiro                                                                                                | (11) EP3600613                                                          | H01M 8/0662                                                                                                                                                           |
| YAMAZAKI, Teruzi                                                                                                 | (21) EP18719290.1                                                       | H01M 8/0668                                                                                                                                                           |
| (51) B01D 53/14                                                                                                  | (47) 07.07.2021                                                         | (11) EP2516325                                                                                                                                                        |
| C07C 209/16                                                                                                      | (87) IB2018052037                                                       | (21) EP10839840.5                                                                                                                                                     |
| C07C 217/08                                                                                                      | 27.09.2018                                                              | (47) 07.07.2021                                                                                                                                                       |
| C10L 3/10                                                                                                        | (22) 26.03.2018                                                         | (87) NO2010000400                                                                                                                                                     |
| (11) EP3624922                                                                                                   | (54) APPARATUS AND METHOD FOR<br>PRODUCING WATER                        | 30.06.2011                                                                                                                                                            |
| (21) EP18723837.3                                                                                                | (73) Vicentini, Massimo                                                 | (22) 03.11.2010                                                                                                                                                       |
| (47) 07.07.2021                                                                                                  | (72) Vicentini, Massimo                                                 | (54) METHOD AND DEVICE FOR<br>SIMULTANEOUS PRODUCTION<br>OF ENERGY IN THE FORMS<br>ELECTRICITY, HEAT AND HYDROGEN<br>GAS                                              |
| (87) EP2018062355                                                                                                | (31) 201700032936                                                       | (73) ZEG Power AS                                                                                                                                                     |
| 22.11.2018                                                                                                       | (32) 24.03.2017                                                         | (72) RAAHEIM, Arne                                                                                                                                                    |
| (22) 14.05.2018                                                                                                  | (33) Italy                                                              | VIK, Arild                                                                                                                                                            |
| (54) ABSORBENT, PROCESS FOR<br>PRODUCING IT AND PROCESS FOR<br>SELECTIVELY REMOVING HYDROGEN<br>SULFIDE USING IT | (51) B01D 53/32                                                         | (31) 20093575                                                                                                                                                         |
| (73) BASF SE                                                                                                     | F24C 15/20                                                              | (32) 22.12.2009                                                                                                                                                       |
| ExxonMobil Research and Engineering<br>Company                                                                   | (11) EP3416736                                                          | (33) Norway                                                                                                                                                           |
| (72) ERNST, Martin                                                                                               | (21) EP17706423.5                                                       | (51) B01D 53/86                                                                                                                                                       |
| VORBERG, Gerald                                                                                                  | (47) 07.07.2021                                                         | B01D 53/94                                                                                                                                                            |
| SIEDER, Georg                                                                                                    | (87) EP2017052749                                                       |                                                                                                                                                                       |
|                                                                                                                  | 24.08.2017                                                              |                                                                                                                                                                       |
|                                                                                                                  | (22) 08.02.2017                                                         |                                                                                                                                                                       |
|                                                                                                                  | (54) DEVICE FOR ARRANGING ONE OR<br>MORE ELECTRODES OF A PLASMA         |                                                                                                                                                                       |

|                                                                    |                                                                                 |                                             |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------|
| (11) EP3064265                                                     | (72) INODA, Satoru                                                              | (32) 27.08.2015                             |
| (21) EP16158069.1                                                  | MATSUEDA, Satoshi                                                               | (33) Sweden                                 |
| (47) 07.07.2021                                                    | TAKI, Kenichi                                                                   |                                             |
| (22) 01.03.2016                                                    | HIRAI, Akimasa                                                                  | (51) B01D 53/94                             |
| (54) SYSTEMS AND METHODS FOR CONTROLLING AFTERTREATMENT SYSTEMS    | (31) 2015186788                                                                 | F01N 3/08                                   |
|                                                                    | (32) 24.09.2015                                                                 | F01N 3/28                                   |
|                                                                    | (33) Japan                                                                      | (11) EP3507469                              |
| (73) AI ALPINE US BIDCO INC.                                       | (51) B01D 53/94                                                                 | (21) EP17762180.2                           |
| (72) DEVARAKONDA, Maruthi Narasinga Rao                            | B01J 23/63                                                                      | (47) 14.07.2021                             |
| (31) 201514635816                                                  | B01J 37/02                                                                      | (87) GB2017052538                           |
| (32) 02.03.2015                                                    | F01N 3/10                                                                       | 08.03.2018                                  |
| (33) United States of America                                      | F01N 3/28                                                                       | (22) 01.09.2017                             |
| (51) B01D 53/86                                                    | (11) EP3034164                                                                  | (54) IMPROVED NOX TRAP                      |
| B01D 53/94                                                         | (21) EP14866380.0                                                               | (73) Johnson Matthey Public Limited Company |
| B01J 29/76                                                         | (47) 14.07.2021                                                                 | (72) CHANDLER, Guy Richard                  |
| B01J 35/04                                                         | (87) JP2014079878                                                               | PHILLIPS, Paul Richard                      |
| B01J 37/00                                                         | 04.06.2015                                                                      | REID, Stuart David                          |
| B01J 37/02                                                         | (22) 11.11.2014                                                                 | STREHLAU, Wolfgang                          |
| B01J 37/03                                                         | (54) EXHAUST GAS PURIFICATION CATALYST                                          | SWALLOW, Daniel                             |
| C01B 39/46                                                         | (73) Cataler Corporation                                                        | (31) 201614923                              |
| (11) EP3077111                                                     | (72) GOTO, Takashi                                                              | (32) 02.09.2016                             |
| (21) EP14821933.0                                                  | TAKI, Kenichi                                                                   | (33) United Kingdom                         |
| (47) 14.07.2021                                                    | MATSUEDA, Satoshi                                                               | (51) B01D 61/02                             |
| (87) US2014068314                                                  | (31) 2013246607                                                                 | B01D 63/10                                  |
| 11.06.2015                                                         | (32) 28.11.2013                                                                 | B01D 65/08                                  |
| (22) 03.12.2014                                                    | (33) Japan                                                                      | C02F 1/44                                   |
| (54) CU-CHA CONTAINING SCR CATALYST                                | (51) B01D 53/94                                                                 | C02F 103/08                                 |
| (73) Johnson Matthey Public Limited Company                        | B01J 23/63                                                                      | (11) EP3415224                              |
| (72) FEDEYKO, Joseph, Michael                                      | F01N 3/10                                                                       | (21) EP17856598.2                           |
| RIVAS-CARDONA, Alejandra                                           | (11) EP3323498                                                                  | (47) 14.07.2021                             |
| CHEN, Hai-Ying                                                     | (21) EP16832853.2                                                               | (87) KR2017009754                           |
| (31) 201361911048 P                                                | (47) 14.07.2021                                                                 | 05.04.2018                                  |
| (32) 03.12.2013                                                    | (87) JP2016071895                                                               | (22) 06.09.2017                             |
| (33) United States of America                                      | 09.02.2017                                                                      | (54) REVERSE OSMOSIS FILTER MODULE          |
| (51) B01D 53/86                                                    | (22) 26.07.2016                                                                 | (73) LG Chem, Ltd.                          |
| B01J 21/08                                                         | (54) EXHAUST GAS PURIFICATION SYSTEM AND STRADDLED VEHICLE                      | (72) CHOI, Junwon                           |
| B01J 23/22                                                         | (73) Yamaha Hatsudoki Kabushiki Kaisha                                          | IM, Ye Hoon                                 |
| B01J 27/053                                                        | (72) MOTEGI, Takuya                                                             | (31) 20160124788                            |
| B01J 27/055                                                        | AKO, Natsuki                                                                    | (32) 28.09.2016                             |
| (11) EP3285913                                                     | HARADA, Hisashi                                                                 | (33) Korea (Republic)                       |
| (21) EP16715588.6                                                  | (31) 2015151594                                                                 | (51) B01D 65/08                             |
| (47) 14.07.2021                                                    | 2015151595                                                                      | B01D 71/56                                  |
| (87) EP2016058079                                                  | (32) 31.07.2015                                                                 | C02F 1/44                                   |
| 27.10.2016                                                         | 31.07.2015                                                                      | C02F 1/70                                   |
| (22) 13.04.2016                                                    | (33) Japan                                                                      | C02F 1/76                                   |
| (54) A PROCESS FOR THE REMOVAL OF SOOT FROM A SULFUROUS GAS STREAM | Japan                                                                           | C02F 5/08                                   |
|                                                                    | (51) B01D 53/94                                                                 | C02F 5/10                                   |
| (73) Haldor Topsøe A/S                                             | F01N 3/023                                                                      | C02F 5/12                                   |
| (72) SØRENSEN, Per Aggerholm                                       | F01N 3/035                                                                      | C02F 5/14                                   |
| CHRISTENSEN, Kurt, Agerbæk                                         | F01N 3/10                                                                       | (11) EP3441368                              |
| (31) 201500245                                                     | F01N 3/20                                                                       | (21) EP17779036.7                           |
| (32) 21.04.2015                                                    | F01N 9/00                                                                       | (47) 07.07.2021                             |
| (33) Denmark                                                       | F01N 13/00                                                                      | (87) JP2017013212                           |
| (51) B01D 53/94                                                    | (11) EP3341600                                                                  | 12.10.2017                                  |
| B01J 23/46                                                         | (21) EP16839708.1                                                               | (22) 30.03.2017                             |
| B01J 23/63                                                         | (47) 07.07.2021                                                                 | (54) WATER TREATMENT METHOD                 |
| F01N 3/10                                                          | (87) SE2016050798                                                               | (73) Toray Industries, Inc.                 |
| (11) EP3354336                                                     | 02.03.2017                                                                      | (72) MAEDA, Tomohiro                        |
| (21) EP16848682.7                                                  | (22) 25.08.2016                                                                 | TANIGUCHI, Masahide                         |
| (47) 07.07.2021                                                    | (54) EXHAUST TREATMENT SYSTEM AND METHOD FOR TREATMENT OF AN EXHAUST GAS STREAM | SAITO, Kenji                                |
| (87) JP2016078091                                                  | (73) Scania CV AB                                                               | (31) 2016077855                             |
| 30.03.2017                                                         | (72) NILSSON, Magnus                                                            | 2016166695                                  |
| (22) 23.09.2016                                                    | BIRGERSSON, Henrik                                                              | (32) 08.04.2016                             |
| (54) CATALYTIC EXHAUST GAS PURIFICATION APPARATUS                  | (31) 1551106                                                                    | 29.08.2016                                  |
| (73) Cataler Corporation                                           |                                                                                 | (33) Japan                                  |
|                                                                    |                                                                                 | Japan                                       |
|                                                                    |                                                                                 | (51) B01D 67/00                             |
|                                                                    |                                                                                 | B01D 69/10                                  |

|                                       |                                         |                                       |
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| B01D 69/12                            | H01M 10/10                              | (21) EP17787267.8                     |
| B05D 1/18                             | H01M 8/10                               | (47) 14.07.2021                       |
| (11) EP3368197                        | H01M 50/409                             | (87) IL2017051107                     |
| (21) EP16788107.7                     | H01M 50/411                             | 19.04.2018                            |
| (47) 14.07.2021                       | H01M 50/44                              | (22) 01.10.2017                       |
| (87) EP2016076016                     | (11) EP3130025                          | (54) WATER CARBONATION UNIT AND       |
| 04.05.2017                            | (21) EP15791926.7                       | CONTINUOUS WATER CARBONATION          |
| (22) 28.10.2016                       | (47) 07.07.2021                         | METHOD.                               |
| (54) METHOD FOR MANUFACTURING OF A    | (87) US2015031215                       | (73) Strauss Water Ltd                |
| CARBON NANOMEMBRANE                   | 19.11.2015                              | (72) WILDER, Haim                     |
| (73) CNM Technologies GmbH            | (22) 15.05.2015                         | YARDENI, Gil                          |
| (72) ANGELOVA, Polina                 | (54) COVALENTLY CROSS-LINKED GEL        | KRYSTAL, Eyal                         |
| SCHNIEDERS, Albert                    | ELECTROLYTES                            | COHEN, Erez                           |
| (31) 102015118412                     | (73) Amtek Research International, LLC. | KALMANOVICH, Gil                      |
| (32) 28.10.2015                       | (72) KIM, Jungseung                     | (31) 24829516                         |
| (33) Germany                          | WATERHOUSE, Robert R.                   | (32) 10.10.2016                       |
| (51) B01D 67/00                       | PEKALA, Richard W.                      | (33) Israel                           |
| B01D 71/40                            | HOSTETLER, Eric B.                      | (51) B01F 3/04                        |
| B01D 71/56                            | (31) 201461993587 P                     | B01F 5/04                             |
| B01D 71/76                            | 201562130288 P                          | B01F 15/00                            |
| B01J 20/26                            | (32) 15.05.2014                         | B01F 15/04                            |
| B01J 20/32                            | 09.03.2015                              | G05D 21/02                            |
| C08G 69/10                            | (33) United States of America           | (11) EP3250976                        |
| C08G 73/02                            | United States of America                | (21) EP16733152.9                     |
| C09D 177/04                           | (51) B01F 1/00                          | (47) 07.07.2021                       |
| C09D 179/02                           | B01F 7/16                               | (87) FR2016051259                     |
| G01N 33/543                           | B01F 13/00                              | 08.12.2016                            |
| (11) EP3326711                        | B01F 13/10                              | (22) 27.05.2016                       |
| (21) EP17205059.3                     | G01N 13/00                              | (54) DEVICE FOR ADJUSTING THE         |
| (47) 07.07.2021                       | G01N 33/15                              | CONCENTRATION OF A GAS IN A           |
| (22) 23.05.2013                       | G01N 35/00                              | LIQUID                                |
| (54) GRAFT COPOLYMER                  | (11) EP3080582                          | (73) Pourtaud, Nicolas                |
| FUNCTIONALIZED ARTICLE                | (21) EP14809379.2                       | Rigail, François                      |
| (73) 3M Innovative Properties Company | (47) 07.07.2021                         | (72) Pourtaud, Nicolas                |
| (72) Bothof, Catherine A.             | (87) EP2014076675                       | Rigail, François                      |
| Griesgraber, George W.                | 18.06.2015                              | (31) 1554843                          |
| Hembre, James I.                      | (22) 05.12.2014                         | (32) 29.05.2015                       |
| Rasmussen, Jerald K.                  | (54) APPARATUS FOR DISSOLUTION          | (33) France                           |
| (31) 201261655516 P                   | TESTING                                 | (51) B01F 3/08                        |
| (32) 05.06.2012                       | (73) SOTAX AG                           | B01F 5/06                             |
| (33) United States of America         | (72) KALBERMATTEN, Gilles               | C12P 19/34                            |
| (51) B01D 69/10                       | BENZ, Rolf                              | C40B 20/08                            |
| B01D 71/40                            | (31) 20662013                           | C40B 30/04                            |
| B01J 39/20                            | (32) 13.12.2013                         | C40B 40/06                            |
| C08F 220/56                           | (33) Switzerland                        | C40B 50/06                            |
| C08J 5/22                             | (51) B01F 1/00                          | C12Q 1/686                            |
| B01J 39/04                            | B01F 15/00                              | (11) EP3253910                        |
| B01J 47/12                            | F24D 19/00                              | (21) EP16747224.0                     |
| (11) EP3290103                        | (11) EP3641919                          | (47) 14.07.2021                       |
| (21) EP16786183.0                     | (21) EP18737701.5                       | (87) US2016016438                     |
| (47) 14.07.2021                       | (47) 14.07.2021                         | 11.08.2016                            |
| (87) JP2016055294                     | (87) GB2018051632                       | (22) 03.02.2016                       |
| 03.11.2016                            | 27.12.2018                              | (54) MULTIPLE-EMULSION NUCLEIC ACID   |
| (22) 23.02.2016                       | (22) 14.06.2018                         | AMPLIFICATION                         |
| (54) FUNCTIONAL POLYMER MEMBRANE ,    | (54) DOSING ASSEMBLY                    | (73) The Regents of the University of |
| SEPARATION MEMBRANE MODULE            | (73) Dosafil Limited                    | California                            |
| AND ION EXCHANGE DEVICE               | (72) ROBINSON, Peter Barry              | (72) ABATE, Adam R.                   |
| (73) FUJIFILM Corporation             | CRICK, Stephen Gary                     | LIM, Shaun                            |
| (72) INOUE, Kazuomi                   | (31) 201709706                          | SUKOVICH, David                       |
| IIZUKA, Yusuke                        | (32) 19.06.2017                         | LANCE, Shea Thompson                  |
| (31) 2015091160                       | (33) United Kingdom                     | (31) 201562112072 P                   |
| 2016002525                            | (51) B01F 3/04                          | (32) 04.02.2015                       |
| (32) 28.04.2015                       | B01F 5/02                               | (33) United States of America         |
| 08.01.2016                            | B01F 13/00                              | (51) B01F 3/12                        |
| (33) Japan                            | B01F 15/00                              | B01F 5/00                             |
| (51) B01D 69/14                       | B67D 1/00                               | B01F 7/18                             |
| H01M 4/14                             | B67D 1/14                               | B01F 15/02                            |
|                                       | (11) EP3523238                          | B28C 5/08                             |

|                                    |                                   |                                |
|------------------------------------|-----------------------------------|--------------------------------|
| B28C 5/38                          | (22) 22.12.2017                   | (51) B01J 4/00                 |
| (11) EP3145686                     | (54) METHOD FOR CONTROLLING A     | B01J 19/00                     |
| (21) EP15723110.1                  | WATER PURIFIER                    | B65D 81/24                     |
| (47) 14.07.2021                    | (73) LG Electronics Inc.          | B65D 81/34                     |
| (87) US2015030078                  | (72) LEE, Sangjoon                | C07C 39/08                     |
| 26.11.2015                         | KIM, Yongbum                      | (11) EP3194354                 |
| (22) 11.05.2015                    | PARK, Jongwoo                     | (21) EP15770478.4              |
| (54) SLURRY MIXER GATE WITH        | (31) 20160179096                  | (47) 14.07.2021                |
| ENHANCED FLOW AND FOAMING          | (32) 26.12.2016                   | (87) EP2015071062              |
| GEOMETRY                           | (33) Korea (Republic)             | 24.03.2016                     |
| (73) United States Gypsum Company  | (51) B01F 13/00                   | (22) 15.09.2015                |
| (72) WITTOLD, James R.             | B01F 15/02                        | (54) METHOD FOR DISCHARGING AN |
| LEE, Chris C.                      | (11) EP3643398                    | OXIDISABLE COMPOUND IN THE     |
| (31) 201462000244 P                | (21) EP19190439.0                 | LIQUID STATE                   |
| 201514686154                       | (47) 07.07.2021                   | (73) Rhodia Operations         |
| (32) 19.05.2014                    | (22) 07.08.2019                   | (72) FISCHER, Lars             |
| 14.04.2015                         | (54) DEVICE AND METHOD FOR        | CAVEZZAN, Jacques              |
| (33) United States of America      | PRODUCING BONE CEMENT             | THOME, Jean-François           |
| United States of America           | (73) Heraeus Medical GmbH         | (31) 1458828                   |
| (51) B01F 3/12                     | (72) Vogt, Sebastian              | (32) 18.09.2014                |
| B01F 5/24                          | Kluge, Thomas                     | (33) France                    |
| B01F 7/16                          | (31) 102018218302                 | (51) B01J 4/00                 |
| (11) EP3110539                     | 102018218303                      | B01J 19/26                     |
| (21) EP15755550.9                  | (32) 25.10.2018                   | B05B 1/26                      |
| (47) 07.07.2021                    | 25.10.2018                        | B05B 7/00                      |
| (87) US2015017175                  | (33) Germany                      | (11) EP3600646                 |
| 03.09.2015                         | Germany                           | (21) EP18719054.1              |
| (22) 24.02.2015                    | (51) B01F 13/00                   | (47) 14.07.2021                |
| (54) MIXING APPARATUS WITH STATOR  | B01F 15/02                        | (87) EP2018057340              |
| AND METHOD                         | (11) EP3662990                    | 27.09.2018                     |
| (73) Schlumberger Technology B.V.  | (21) EP19200750.8                 | (22) 22.03.2018                |
| (72) LUHARUKA, Rajesh              | (47) 07.07.2021                   | (54) FCC UNIT CHARGE INJECTION |
| CHOCHUA, Gocha                     | (22) 01.10.2019                   | DEVICE WITH LIMITED PRESSURE   |
| PHAM, Hau Nguyen-Phuc              | (54) DEVICE FOR MIXING A BONE     | DROP                           |
| AYYAD, Mark                        | CEMENT WITH A CAVITY FOR          | (73) Total Raffinage Chimie    |
| (31) 201414192838                  | MONOMER TRANSFER AND              | (72) LESAGE, Romain            |
| 201414192821                       | PROCESS                           | DECKER, Sébastien              |
| (32) 27.02.2014                    | (73) Heraeus Medical GmbH         | RABOIN, Jean-Christophe        |
| 27.02.2014                         | (72) Vogt, Sebastian Dr.          | KERNEUR, Youen                 |
| (33) United States of America      | Kluge, Thomas Dr.                 | (31) 1752496                   |
| United States of America           | (31) 102018131266                 | (32) 24.03.2017                |
| (51) B01F 5/00                     | (32) 07.12.2018                   | (33) France                    |
| F01N 3/20                          | (33) Germany                      | (51) B01J 4/00                 |
| F01N 3/28                          | (51) B01F 13/00                   | B01J 19/26                     |
| (11) EP3583303                     | B01L 3/00                         | B05B 1/26                      |
| (21) EP17706238.7                  | B01L 7/00                         | B05B 7/00                      |
| (47) 14.07.2021                    | G01N 15/00                        | C10G 11/18                     |
| (87) EP2017053788                  | G01N 15/10                        | (11) EP3600647                 |
| 23.08.2018                         | G01N 15/14                        | (21) EP18719055.8              |
| (22) 20.02.2017                    | G01N 35/08                        | (47) 14.07.2021                |
| (54) A MIXER BOX AND A USE THEREOF | C12Q 1/6844                       | (87) EP2018057341              |
| (73) Volvo Penta Corporation       | (11) EP3570979                    | 27.09.2018                     |
| (72) KANNISTO, Hannes              | (21) EP18703905.2                 | (22) 22.03.2018                |
| (51) B01F 7/00                     | (47) 14.07.2021                   | (54) IMPROVED CHARGE INJECTION |
| B01F 7/18                          | (87) EP2018051222                 | DEVICE FOR AN FCC UNIT         |
| B01F 15/00                         | 26.07.2018                        | (73) Total Raffinage Chimie    |
| B67D 1/08                          | (22) 18.01.2018                   | (72) LESAGE, Romain            |
| C02F 1/00                          | (54) MICROFLUIDIC SYSTEM          | DECKER, Sébastien              |
| F25D 3/02                          | AND METHOD WITH TIGHTLY           | RABOIN, Jean-Christophe        |
| F25D 29/00                         | CONTROLLED INCUBATION TIME AND    | KERNEUR, Youen                 |
| F25D 31/00                         | CONDITIONS                        | (31) 1752497                   |
| F28F 13/12                         | (73) Biomillenia SAS              | (32) 24.03.2017                |
| G05D 23/19                         | (72) DU, Guansheng                | (33) France                    |
| (11) EP3561419                     | LÖFFERT, Dirk                     | (51) B01J 4/02                 |
| (21) EP17889172.7                  | SHIUE, Eric                       | G01N 35/00                     |
| (47) 07.07.2021                    | (31) 17151966                     | G01N 35/10                     |
| (87) KR2017015396                  | (32) 18.01.2017                   | G01N 37/00                     |
| 05.07.2018                         | (33) European Patent Office (EPO) | (11) EP1988399                 |

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| (47) 07.07.2021                  | (47) 07.07.2021                           | (11) EP2720788                          |
| (87) JP2007052917                | (87) AU2011000682                         | (21) EP12723664.4                       |
| 30.08.2007                       | 08.12.2011                                | (47) 14.07.2021                         |
| (22) 19.02.2007                  | (22) 02.06.2011                           | (87) EP2012059698                       |
| (54) LIQUID TRANSPORTING DEVICE  | (54) METHOD AND APPARATUS FOR             | 27.12.2012                              |
| (73) Musashi Engineering, Inc.   | SEPARATING LOW DENSITY                    | (22) 24.05.2012                         |
| (72) IKUSHIMA, Kazumasa          | PARTICLES FROM FEED SLURRIES              | (54) METHOD FOR MODIFYING A             |
| (31) 2006043086                  | (73) Newcastle Innovation Limited         | METHANE-CONTAINING GAS STREAM           |
| (32) 20.02.2006                  | (72) GALVIN, Kevin Patrick                | (73) Evonik Operations GmbH             |
| (33) Japan                       | (31) 2010902439                           | (72) MARKOWZ, Georg                     |
| (51) B01J 7/00                   | (32) 03.06.2010                           | LANG, Jürgen Erwin                      |
| C01B 3/04                        | (33) Australia                            | SCHÜTTE, Rüdiger                        |
| (11) EP3408222                   | (51) B01J 13/00                           | (31) 102011077788                       |
| (21) EP17706562.0                | (11) EP3240628                            | (32) 20.06.2011                         |
| (47) 14.07.2021                  | (21) EP15817880.6                         | (33) Germany                            |
| (87) FR2017050145                | (47) 14.07.2021                           | (51) B01J 20/04                         |
| 03.08.2017                       | (87) EP2015081266                         | B01J 20/10                              |
| (22) 24.01.2017                  | 07.07.2016                                | B01J 20/26                              |
| (54) SYSTEM AND PROCESS FOR      | (22) 28.12.2015                           | B01J 20/28                              |
| GENERATING HYDROGEN GAS          | (54) CARBOXYL CROSS-LINKED                | B01J 20/30                              |
| (73) ARIANEGROUP SAS             | CHONDROITIN HYDROGELS AND                 | C08J 3/075                              |
| (72) FOURNET, Arnaud             | THEIR USE FOR SOFT TISSUE                 | C08J 3/24                               |
| FOURNIER, Jean-Jacques           | APPLICATIONS                              | (11) EP3279238                          |
| (31) 1650584                     | (73) Galderma S.A.                        | (21) EP16772856.7                       |
| (32) 26.01.2016                  | (72) Karlsson Anders                      | (47) 14.07.2021                         |
| (33) France                      | Mojarradi, Hotan                          | (87) JP2016060175                       |
| (51) B01J 8/18                   | (31) 14200385                             | 06.10.2016                              |
| B01J 8/22                        | (32) 29.12.2014                           | (22) 29.03.2016                         |
| B01J 8/44                        | (33) European Patent Office (EPO)         | (54) SUPER ABSORBENT POLYACRYLIC        |
| C01B 33/021                      | (51) B01J 13/18                           | ACID (SALT)-BASED RESIN POWDER,         |
| C01B 33/027                      | (11) EP3678768                            | METHOD FOR MANUFACTURING                |
| C23C 16/24                       | (21) EP18765839.8                         | SAME, AND METHOD FOR                    |
| C23C 16/44                       | (47) 14.07.2021                           | EVALUATING SAME                         |
| C23C 16/442                      | (87) EP2018073653                         | (73) Nippon Shokubai Co., Ltd.          |
| F27B 15/10                       | 07.03.2019                                | (72) TADA, Kenji                        |
| F27B 15/20                       | (22) 04.09.2018                           | TORII, Kazushi                          |
| (11) EP3278872                   | (54) THERMALLY EXPANDABLE                 | (31) 2015074180                         |
| (21) EP16773349.2                | MICROSPHERES PREPARED FROM                | 2015193458                              |
| (47) 07.07.2021                  | BIO-BASED MONOMERS                        | 2015197077                              |
| (87) KR2016002990                | (73) Nouryon Chemicals International B.V. | (32) 31.03.2015                         |
| 06.10.2016                       | (72) NORDIN, Ove                          | 30.09.2015                              |
| (22) 24.03.2016                  | JONSSON, Magnus                           | 02.10.2015                              |
| (54) METHOD FOR PREPARING        | (31) 17189154                             | (33) Japan                              |
| GRANULAR POLYSILICON USING A     | (32) 04.09.2017                           | Japan                                   |
| FLUIDISED-BED REACTOR SYSTEM     | (33) European Patent Office (EPO)         | Japan                                   |
| (73) Hanwha Chemical Corporation | (51) B01J 19/02                           | (51) B01J 20/18                         |
| (72) AHN, Gui Ryong              | C10G 11/18                                | B01J 20/28                              |
| KIM, Sang Ah                     | F27D 1/14                                 | B01J 20/30                              |
| KIM, Ji Ho                       | (11) EP3600645                            | B01J 29/04                              |
| HAN, Joo Hee                     | (21) EP18719056.6                         | B01J 29/18                              |
| KIM, Gil Ho                      | (47) 14.07.2021                           | B01J 35/10                              |
| LEE, Won Ik                      | (87) EP2018057346                         | B01J 37/03                              |
| (31) 20150046386                 | 27.09.2018                                | B01J 37/30                              |
| 20150053976                      | (22) 22.03.2018                           | C01B 39/26                              |
| (32) 01.04.2015                  | (54) ANCHORING STRUCTURE FOR              | (11) EP3527535                          |
| 16.04.2015                       | AN ANTI-EROSION COATING, IN               | (21) EP17859495.8                       |
| (33) Korea (Republic)            | PARTICULAR FOR PROTECTING A               | (47) 14.07.2021                         |
| Korea (Republic)                 | WALL OF AN FCC UNIT                       | (87) JP2017036892                       |
| (51) B01J 8/20                   | (73) Total Raffinage Chimie               | 19.04.2018                              |
| B03B 5/00                        | (72) LESAGE, Romain                       | (22) 11.10.2017                         |
| B03B 5/32                        | SIMON, Hubert                             | (54) MORDENITE ZEOLITE AND              |
| B03B 5/62                        | (31) 1752493                              | PRODUCTION METHOD THEREFOR              |
| B03D 1/14                        | (32) 24.03.2017                           | (73) Mitsui Mining & Smelting Co., Ltd. |
| B03D 1/24                        | (33) France                               | The University of Tokyo                 |
| B04B 1/00                        | (51) B01J 19/08                           | (72) KOIKE Natsume                      |
| B04B 1/04                        | C01B 3/24                                 | ITABASHI Keiji                          |
| (11) EP2576070                   | C10G 15/12                                | ELANGOVAN Shanmugam Palani              |

|                                   |                                          |                                   |
|-----------------------------------|------------------------------------------|-----------------------------------|
| OKUBO Tatsuya                     | C01F 17/00                               | B01J 23/745                       |
| (31) 2016200613                   | (11) EP3368481                           | B01J 29/08                        |
| (32) 12.10.2016                   | (21) EP16788758.7                        | B01J 29/18                        |
| (33) Japan                        | (47) 14.07.2021                          | B01J 29/40                        |
| (51) B01J 20/18                   | (87) GB2016053335                        | B01J 29/65                        |
| C01B 23/00                        | 04.05.2017                               | B01J 29/70                        |
| F25J 3/02                         | (22) 27.10.2016                          | C10B 53/02                        |
| F25J 3/04                         | (54) ZIRCONIA-BASED COMPOSITIONS         | C10B 57/06                        |
| (11) EP2961688                    | FOR USE AS THREE WAY CATALYSTS           | C10G 1/00                         |
| (21) EP14713954.7                 | (73) Magnesium Elektron Limited          | C10G 1/08                         |
| (47) 07.07.2021                   | (72) HARRIS, Deborah Jayne               | C12P 7/02                         |
| (87) US2014018287                 | SCAPENS, David Alastair                  | C12P 7/04                         |
| 04.09.2014                        | (31) 201518996                           | C12P 7/06                         |
| (22) 25.02.2014                   | (32) 27.10.2015                          | C12P 7/16                         |
| (54) ADSORBENT COMPOSITION FOR    | (33) United Kingdom                      | C12P 7/18                         |
| ARGON PURIFICATION                | (51) B01J 21/08                          | C12P 7/52                         |
| (73) Praxair Technology, Inc.     | B01J 21/18                               | C12R 1/00                         |
| (72) BARRETT, Philip, A.          | B01J 27/185                              | (11) EP3464511                    |
| PONTONIO, Steven, J.              | B01J 27/224                              | (21) EP17720819.6                 |
| STEPHENSON, Neil, A.              | B01J 37/02                               | (47) 07.07.2021                   |
| KECHAGIA, Persefoni, E.           | B01J 37/18                               | (87) EP2017060548                 |
| (31) 201313782682                 | C07C 45/50                               | 07.12.2017                        |
| (32) 01.03.2013                   | (11) EP3130399                           | (22) 03.05.2017                   |
| (33) United States of America     | (21) EP16183758.8                        | (54) PROCESS FOR PRODUCING BTX    |
| (51) B01J 20/22                   | (47) 07.07.2021                          | BY CATALYTIC PYROLYSIS FROM       |
| B41J 2/175                        | (22) 11.08.2016                          | BIOMASS WITHOUT RECYCLING         |
| H01L 51/00                        | (54) METHOD FOR THE                      | OXYGENATED COMPOUNDS              |
| (11) EP3429859                    | HYDROFORMYLATION OF OLEFINS              | (73) IFP Energies nouvelles       |
| (21) EP17710858.6                 | AND/OR ALKYNES IN THE GAS PHASE          | (72) FEUGNET, Frederic            |
| (47) 07.07.2021                   | WITH A MIXTURE OF HYDROGEN               | LOPES FERREIRA, Nicolas           |
| (87) EP2017055641                 | AND CARBON MONOXIDE IN THE               | KASZTELAN, Slavik                 |
| 21.09.2017                        | PRESENCE OF HETEROGENEOUS                | (31) 1654894                      |
| (22) 10.03.2017                   | CATALYST                                 | (32) 31.05.2016                   |
| (54) PRINTER CARTRIDGE COMPRISING | (73) BASF SE                             | (33) France                       |
| A FORMULATION CONTAINING          | (72) Schunk, Stephan A                   | (51) B01J 23/44                   |
| AT LEAST ONE ORGANIC              | Lejkowski, Michael                       | B01J 23/96                        |
| SEMICONDUCTOR                     | Titlbach, Sven                           | B01J 35/00                        |
| (73) Merck Patent GmbH            | Alvarado Rupflin, Luis Tojil             | B01J 35/02                        |
| (72) HILARIUS, Volker             | Kaiser, Harry                            | B01J 37/02                        |
| BOEHM, Edgar                      | (31) 15180813                            | B01J 37/16                        |
| SUERMAN, Juliane                  | (32) 12.08.2015                          | B01J 38/02                        |
| GOULDING, Mark                    | (33) European Patent Office (EPO)        | C07C 45/45                        |
| GARCIA DIEZ, Leticia              | (51) B01J 23/00                          | C07C 45/61                        |
| (31) 102016003104                 | B01J 27/057                              | C07C 47/02                        |
| (32) 15.03.2016                   | B01J 37/03                               | (11) EP3408250                    |
| (33) Germany                      | B01J 37/06                               | (21) EP17744798.4                 |
| (51) B01J 20/26                   | B01J 37/10                               | (47) 14.07.2021                   |
| C08F 2/18                         | C07C 5/48                                | (87) US2017014822                 |
| C08F 8/12                         | (11) EP3528945                           | 03.08.2017                        |
| C08F 212/36                       | (21) EP17804288.3                        | (22) 25.01.2017                   |
| C08F 226/02                       | (47) 07.07.2021                          | (54) SINGLE-STEP CONVERSION       |
| (11) EP3196217                    | (87) IB2017056200                        | OF N-BUTYRALDEHYDE TO 2-          |
| (21) EP15842896.1                 | 26.04.2018                               | ETHYLHEXANAL                      |
| (47) 07.07.2021                   | (22) 06.10.2017                          | (73) Eastman Chemical Company     |
| (87) JP2015064978                 | (54) PROCESS FOR PRODUCING               | (72) BOPPANA, Venkata, Bharat Ram |
| 24.03.2016                        | OXIDATIVE DEHYDROGENATION                | HAMPTON, Kenneth, Wayne, Jr.      |
| (22) 26.05.2015                   | CATALYSTS USING HYDROTHERMAL             | LIU, Zhufang                      |
| (54) METHOD FOR PRODUCING         | TREATMENT AND PEROXIDE                   | SUMNER, Charles, Edwan, Jr.       |
| POLYVINYLAMINE CROSSLINKED        | TREATMENT                                | TUSTIN, Gerald, Charles           |
| POLYMER PARTICLES                 | (73) Nova Chemicals (International) S.A. | STEINMETZ, Guy, Ralph             |
| (73) HYMO CORPORATION             | (72) SIMANZHENKOV, Vasily                | STEFFEY, Melissa, Page            |
| (72) HONDA, Go                    | GAO, Xiaoliang                           | (31) 201615009098                 |
| (31) 2014189531                   | SULLIVAN, David                          | (32) 28.01.2016                   |
| (32) 18.09.2014                   | (31) 2945435                             | (33) United States of America     |
| (33) Japan                        | (32) 18.10.2016                          | (51) B01J 23/883                  |
| (51) B01J 21/06                   | (33) Canada                              | B01J 37/20                        |
| B01J 23/10                        | (51) B01J 23/06                          | C10G 45/60                        |
| C01G 25/02                        | B01J 23/08                               | C10G 47/06                        |

|                                     |                                                |                                    |
|-------------------------------------|------------------------------------------------|------------------------------------|
| (11) EP3545053                      | C08L 83/04                                     | (47) 07.07.2021                    |
| (21) EP17811776.8                   | C08L 83/08                                     | (87) US2016049952                  |
| (47) 07.07.2021                     | C09D 183/08                                    | 09.03.2017                         |
| (87) US2017062163                   | (11) EP3606665                                 | (22) 01.09.2016                    |
| 31.05.2018                          | (21) EP18717656.5                              | (54) BEAD SEPARATION IN            |
| (22) 17.11.2017                     | (47) 14.07.2021                                | MICROFLUIDICS                      |
| (54) NAPHTHENE RING OPENING OVER    | (87) GB2018050876                              | (73) Tecan Trading AG              |
| SELF-SUPPORTED MULTI-METALLIC       | 11.10.2018                                     | (72) PERROUD, Thomas               |
| CATALYSTS                           | (22) 29.03.2018                                | TRAN, Dan                          |
| (73) Chevron U.S.A. Inc.            | (54) A METHOD OF SYNTHESISING A                | HOFFMEYER, Daniel                  |
| (72) ZHAN, Bi-Zeng                  | PT(II) COMPLEX; A PT(II) COMPLEX;              | LAY, Tiffany                       |
| KUPERMAN, Alexander                 | USE OF SUCH A COMPLEX AS A                     | DHINDSA, Manjeet                   |
| (31) 201615358248                   | PHOTOACTIVATABLE CATALYST IN A                 | (31) 4814115 P                     |
| (32) 22.11.2016                     | HYDROSILYLATION REACTION                       | (32) 02.09.2015                    |
| (33) United States of America       | (73) Johnson Matthey Public Limited            | (33) United States of America      |
| (51) B01J 27/18                     | Company                                        | (51) B01L 3/00                     |
| C08G 69/06                          | (72) ASHFIELD, Laura                           | (11) EP3572151                     |
| C08G 69/14                          | KEEP, Ann                                      | (21) EP19175985.1                  |
| C08K 3/32                           | (31) 201705330                                 | (47) 07.07.2021                    |
| C08K 7/02                           | (32) 03.04.2017                                | (22) 22.05.2019                    |
| C08L 1/02                           | (33) United Kingdom                            | (54) A MICROFLUIDIC CONNECTION AND |
| C08L 77/00                          | (51) B01L 1/02                                 | A CONNECTING INTERFACE FOR         |
| C08L 77/02                          | G01N 17/00                                     | FLUIDICALLY INTERCONNECTING        |
| (11) EP3266833                      | (11) EP3658892                                 | MICROFLUIDIC CHANNELS              |
| (21) EP16758933.2                   | (21) EP18746120.7                              | (73) miDiagnostics NV              |
| (47) 14.07.2021                     | (47) 14.07.2021                                | (72) JONES, Benjamin               |
| (87) JP2016056356                   | (87) EP2018069501                              | PEUMANS, Peter                     |
| 09.09.2016                          | 31.01.2019                                     | MARQUORDT, Claus                   |
| (22) 02.03.2016                     | (22) 18.07.2018                                | HAUPT, Remus Brix Anders           |
| (54) POLYAMIDE RESIN COMPOSITION    | (54) A CITY POLLUTION ENVIRONMENT              | (31) 18173872                      |
| (73) UNITIKA LTD.                   | SIMULATION APPARATUS                           | (32) 23.05.2018                    |
| (72) NAKAI, Miho                    | (73) BASF SE                                   | (33) European Patent Office (EPO)  |
| KUMAZAWA, Shohei                    | (72) RAO, Zhi                                  | (51) B01L 3/00                     |
| IKEMOTO, Kenji                      | STADLER, Daniel                                | B01L 7/00                          |
| (31) 2015041353                     | CHEN, Rodney                                   | G01N 21/64                         |
| (32) 03.03.2015                     | (31) PCT/CN2017/094865                         | G01N 21/76                         |
| (33) Japan                          | (32) 28.07.2017                                | C12Q 1/6869                        |
| (51) B01J 29/068                    | (33) World Intellectual Property Office (WIPO) | (11) EP3619521                     |
| B01J 29/072                         | (51) B01L 3/00                                 | (21) EP19701425.1                  |
| B01J 29/08                          | (11) EP3406340                                 | (47) 07.07.2021                    |
| B01J 29/10                          | (21) EP17172994.0                              | (87) US2019012536                  |
| B01J 29/12                          | (47) 07.07.2021                                | 11.07.2019                         |
| B01J 29/14                          | (22) 26.05.2017                                | (22) 07.01.2019                    |
| B01J 35/10                          | (54) FLOW CELL WITH HOUSING                    | (54) HIGH-THROUGHPUT SEQUENCING    |
| C10G 47/18                          | COMPONENT                                      | WITH SEMICONDUCTOR-BASED           |
| C10G 47/20                          | (73) THINXXS MICROTECHNOLOGY AG                | DETECTION                          |
| (11) EP3356035                      | (72) WEBER, Lutz                               | (73) Illumina Inc.                 |
| (21) EP16769938.8                   | (51) B01L 3/00                                 | (72) DEHLINGER, Dietrich           |
| (47) 07.07.2021                     | (11) EP3487622                                 | AGAH, Ali                          |
| (87) EP2016071858                   | (21) EP17737777.7                              | FUNG, Tracy Helen                  |
| 06.04.2017                          | (47) 07.07.2021                                | KOSTEM, Emrah                      |
| (22) 15.09.2016                     | (87) EP2017067099                              | (31) 201862614934 P                |
| (54) PROCESS FOR PRODUCING          | 01.02.2018                                     | 201862614930 P                     |
| AROMATICS FROM A HEAVY              | (22) 07.07.2017                                | 2020758                            |
| HYDROCARBON FEED                    | (54) MICROFLUIDIC DEVICE                       | (32) 08.01.2018                    |
| (73) SABIC Global Technologies B.V. | (73) Leibniz-Institut für Festkörper- und      | 08.01.2018                         |
| (72) ARAMBURO, Luis                 | Werkstofforschung Dresden e.V.                 | 12.04.2018                         |
| FARMER, Dustin                      | (72) WINKLER, Andreas                          | (33) United States of America      |
| SCOTT, Stevenson                    | HARAZIM, Stefan                                | United States of America           |
| (31) 15187655                       | (31) 102016213577                              | Netherlands                        |
| (32) 30.09.2015                     | 102016124059                                   | (51) B01L 3/00                     |
| (33) European Patent Office (EPO)   | (32) 25.07.2016                                | B01L 9/06                          |
| (51) B01J 31/22                     | 12.12.2016                                     | G01N 35/02                         |
| C07C 47/565                         | (33) Germany                                   | G01N 35/04                         |
| C08G 77/08                          | Germany                                        | (11) EP3196656                     |
| C08G 77/12                          | (51) B01L 3/00                                 | (21) EP16275011.1                  |
| C08G 77/20                          | (11) EP3334532                                 | (47) 14.07.2021                    |
| C08K 5/00                           | (21) EP16770817.1                              | (22) 20.01.2016                    |



|                                                                                                              |                                                                                                                                                                                                         |                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) AUTOMATED SAMPLE STORAGE SYSTEM HAVING STORAGE CONSUMABLE WITH SUB-OPTIMAL STORAGE DENSITY              | (21) EP10716615.9<br>(47) 07.07.2021<br>(87) IB2010000580<br>23.09.2010                                                                                                                                 | (54) ANALYZING DEVICE, AND ANALYZING APPARATUS AND ANALYZING METHOD USING THE DEVICE                                                                                                                                                 |
| (73) Brooks Automation, Inc.                                                                                 | (22) 17.03.2010                                                                                                                                                                                         | (73) PHC Holdings Corporation                                                                                                                                                                                                        |
| (72) Croquette, Etienne<br>Grimwood, Robin<br>Harding, David<br>Walsh, Chris                                 | (54) METHOD FOR ISOLATION OF PARTICLES<br>(73) Menarini Silicon Biosystems S.p.A.<br>(72) MEDORO, Gianni<br>PEROZZIELLO, Gerardo<br>CALANCA, Alex<br>SIMONE, Giuseppina<br>MANARESI, Nicolò             | (72) SAIKI, Hiroshi<br>TAGASHIRA, Kouzou<br>SUGIMOTO, Hirofumi<br>WATANABE, Kenji<br>ISHIBASHI, Kenji<br>MIYATA, Takuji                                                                                                              |
| (51) B01L 3/00<br>B65D 53/06<br>G01N 1/10                                                                    | (31) BO20090155<br>(32) 17.03.2009<br>(33) Italy                                                                                                                                                        | (31) 2008024624<br>2008024625<br>2008113265<br>2009012434                                                                                                                                                                            |
| (11) EP3578949<br>(21) EP19177443.9<br>(47) 14.07.2021<br>(22) 29.05.2019                                    | (51) B01L 3/00<br>G01F 11/10<br>G01F 11/12<br>G01N 21/03<br>G01N 33/543                                                                                                                                 | (32) 05.02.2008<br>05.02.2008<br>24.04.2008<br>23.01.2009                                                                                                                                                                            |
| (54) ANALYTICAL STORAGE DEVICE                                                                               | (33) Japan<br>Japan<br>Japan<br>Japan                                                                                                                                                                   | (33) Japan                                                                                                                                                                                                                           |
| (73) LGC Standards                                                                                           | (11) EP3544734<br>(21) EP17873396.0<br>(47) 07.07.2021                                                                                                                                                  | (51) B01L 3/00<br>G01N 27/447                                                                                                                                                                                                        |
| (72) RETTBERG, Thomas M.<br>SUKCHAROENPHON, Kengkaj<br>BIGGERSTAFF, Daniel                                   | (87) FI2017050797<br>31.05.2018<br>(22) 21.11.2017<br>(54) LAB-ON-A-CHIP DEVICE FOR PERFORMING ANALYSES<br>(73) Labmaster Oy<br>(72) PERÄLÄ, Petri<br>KORPELA, Timo<br>WAHLROOS, Tony<br>KORPELA, Saara | (11) EP2423679<br>(21) EP11178826.1<br>(47) 14.07.2021<br>(22) 25.08.2011<br>(54) Analysis apparatus and analysis method<br>(73) ARKRAY, Inc.<br>(72) Sugiyama, Koji<br>Matsumoto, Daisuke<br>Shiraki, Yasunori<br>Yonehara, Satoshi |
| (31) 201815995011<br>(32) 31.05.2018<br>(33) United States of America                                        | (31) 20165903<br>(32) 28.11.2016<br>(33) Finland                                                                                                                                                        | (31) 2010188102<br>2011171910<br>(32) 25.08.2010<br>05.08.2011                                                                                                                                                                       |
| (51) B01L 3/00<br>C12M 3/00                                                                                  | (51) B01L 3/00<br>G01N 21/07<br>G01N 35/00                                                                                                                                                              | (33) Japan<br>Japan                                                                                                                                                                                                                  |
| (11) EP3452218<br>(21) EP17726545.1<br>(47) 14.07.2021                                                       | (11) EP2946215<br>(21) EP14700777.7<br>(47) 14.07.2021                                                                                                                                                  | (51) B01L 3/00<br>G01N 29/02<br>G01N 29/036<br>G01N 29/22<br>H03H 9/15                                                                                                                                                               |
| (87) EP2017060561<br>09.11.2017<br>(22) 03.05.2017                                                           | (87) GB2014050124<br>24.07.2014<br>(22) 16.01.2014                                                                                                                                                      | (11) EP2999959<br>(21) EP14801303.0<br>(47) 07.07.2021<br>(87) US2014039400<br>27.11.2014<br>(22) 23.05.2014                                                                                                                         |
| (54) MULTIWELL IMAGING PLATE AND METHOD FOR INCUBATING NON-ADHERENT CELLS                                    | (54) MODULAR ASSAY SYSTEM<br>(73) Mast Group Limited<br>(72) WONG, Dr. Ken Jin<br>WILLIAMS, David Hugh<br>MCELARNEY, Iain<br>GILLIES, Elizabeth                                                         | (54) TWO PART FLUID ASSEMBLY<br>(73) Qorvo US, Inc.<br>(72) WEBSTER, James Russell                                                                                                                                                   |
| (73) CeMM - Forschungszentrum für Molekulare Medizin GmbH                                                    | (31) 201300813<br>(32) 16.01.2013<br>(33) United Kingdom                                                                                                                                                | (31) 201361826845 P<br>(32) 23.05.2013<br>(33) United States of America                                                                                                                                                              |
| (72) KRALL, Nikolaus<br>VLADIMER, Gregory<br>SNIJDER, Berend                                                 | (51) B01L 3/00<br>G01N 21/07<br>G01N 35/00<br>G01N 35/04<br>G01N 35/08                                                                                                                                  | (51) B01L 3/00<br>G01N 33/48                                                                                                                                                                                                         |
| (31) 16168400<br>(32) 04.05.2016<br>(33) European Patent Office (EPO)                                        | (11) EP2256501<br>(21) EP09708335.6<br>(47) 07.07.2021<br>(87) JP2009000420<br>13.08.2009<br>(22) 04.02.2009                                                                                            | (11) EP3277428<br>(21) EP16769645.9<br>(47) 14.07.2021<br>(87) US2016023852<br>29.09.2016<br>(22) 23.03.2016<br>(54) SELF-CONTAINED SLIDE RECEPTACLE FOR PATIENT SPECIMENS                                                           |
| (51) B01L 3/00<br>F16K 99/00                                                                                 |                                                                                                                                                                                                         |                                                                                                                                                                                                                                      |
| (11) EP3052236<br>(21) EP14848694.7<br>(47) 14.07.2021<br>(87) US2014058445<br>02.04.2015<br>(22) 30.09.2014 |                                                                                                                                                                                                         |                                                                                                                                                                                                                                      |
| (54) MICROFLUIDIC CARTRIDGE DEVICE AND METHODS OF USE AND ASSEMBLY                                           |                                                                                                                                                                                                         |                                                                                                                                                                                                                                      |
| (73) Bio-Rad Laboratories, Inc.                                                                              |                                                                                                                                                                                                         |                                                                                                                                                                                                                                      |
| (72) KIANI, Sepehr<br>HUNG, Tony<br>STOKES, Peter<br>SHARPE, Julia<br>ABATE, Adam<br>ESMAIL, Adnan           |                                                                                                                                                                                                         |                                                                                                                                                                                                                                      |
| (31) 201361884432 P<br>(32) 30.09.2013<br>(33) United States of America                                      |                                                                                                                                                                                                         |                                                                                                                                                                                                                                      |
| (51) B01L 3/00<br>F16K 99/00<br>G01N 35/00                                                                   |                                                                                                                                                                                                         |                                                                                                                                                                                                                                      |
| (11) EP2408561                                                                                               |                                                                                                                                                                                                         |                                                                                                                                                                                                                                      |

|                                                                                                                                                       |                                                                                       |                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| (73) Iqbal, Shazi                                                                                                                                     | (22) 23.05.2017                                                                       | (21) EP15731749.6                                                                         |
| (72) MAYO, Michael<br>PARKS, Paul<br>GREIS, Alexander                                                                                                 | (54) BEARING HOUSING SUPPORT OF A<br>DOUBLE-ROLL CRUSHER                              | (47) 07.07.2021                                                                           |
| (31) 201514666301                                                                                                                                     | (73) Takraf GmbH                                                                      | (87) US2015032176                                                                         |
| (32) 23.03.2015                                                                                                                                       | (72) DAAMS, Jürgen Peter                                                              | 26.11.2015                                                                                |
| (33) United States of America                                                                                                                         | DE LA CRUZ Y ARANDA, Marcelino                                                        | (22) 22.05.2015                                                                           |
| (51) B01L 3/00                                                                                                                                        | FRANGENBERG, Meinhard                                                                 | (54) SYSTEM AND METHOD FOR<br>RECOVERING METALS FROM A<br>WASTE STREAM                    |
| G01N 35/00                                                                                                                                            | (31) 102016209247                                                                     | (73) Tav Holdings, Inc.                                                                   |
| G01N 35/04                                                                                                                                            | (32) 27.05.2016                                                                       | Valerio, Thomas                                                                           |
| (11) EP3281701                                                                                                                                        | (33) Germany                                                                          | (72) VALERIO, Thomas                                                                      |
| (21) EP16183569.9                                                                                                                                     | (51) B02C 13/09                                                                       | (31) 201462002049 P                                                                       |
| (47) 14.07.2021                                                                                                                                       | B02C 13/26                                                                            | (32) 22.05.2014                                                                           |
| (22) 10.08.2016                                                                                                                                       | (11) EP2558206                                                                        | (33) United States of America                                                             |
| (54) PLATE WITH WELLS FOR CHEMICAL<br>OR BIOLOGICAL REACTIONS, AND<br>METHOD FOR MULTIPLE IMAGING<br>OF SUCH A PLATE BY MEANS OF AN<br>IMAGING SYSTEM | (21) EP11706819.7                                                                     | (51) B03C 3/08                                                                            |
| (73) F. Hoffmann-La Roche AG                                                                                                                          | (47) 14.07.2021                                                                       | B03C 3/12                                                                                 |
| (72) ZEDER, Michael                                                                                                                                   | (87) EP2011053346                                                                     | B03C 3/32                                                                                 |
| (51) B01L 3/02                                                                                                                                        | 20.10.2011                                                                            | B03C 3/41                                                                                 |
| G01N 33/487                                                                                                                                           | (22) 04.03.2011                                                                       | B03C 3/60                                                                                 |
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| (21) EP16836035.2                                                                                                                                     | (73) Sandvik Intellectual Property AB                                                 | (21) EP13723999.2                                                                         |
| (47) 14.07.2021                                                                                                                                       | (72) DALLIMORE, Rowan                                                                 | (47) 07.07.2021                                                                           |
| (87) US2016049460                                                                                                                                     | KJAERRAN, Knut                                                                        | (87) NL2013050324                                                                         |
| 16.02.2017                                                                                                                                            | FORSBERG, Andreas                                                                     | 07.11.2013                                                                                |
| (22) 30.08.2016                                                                                                                                       | (31) 1050377                                                                          | (22) 01.05.2013                                                                           |
| (54) SYSTEMS AND METHODS ENABLING<br>PATCH-CLAMP RE-USE                                                                                               | (32) 16.04.2010                                                                       | (54) FLUID DISPLACEMENT DEVICE                                                            |
| (73) Georgia Tech Research Corporation                                                                                                                | (33) Sweden                                                                           | (73) Virus Free Air B.V.                                                                  |
| (72) KOLB, Ilya                                                                                                                                       | (51) B02C 17/18                                                                       | (72) KHOURY, Eliane                                                                       |
| STOY, William                                                                                                                                         | B02C 23/06                                                                            | VONS, Vincent Adrian                                                                      |
| ROUSSEAU, Erin                                                                                                                                        | B07B 7/01                                                                             | TIMMERMANS, Hendrikus Johannes                                                            |
| FOREST, Craig R.                                                                                                                                      | B07B 11/02                                                                            | (31) 2008735                                                                              |
| (31) 201615232770                                                                                                                                     | C04B 24/26                                                                            | (32) 01.05.2012                                                                           |
| (32) 09.08.2016                                                                                                                                       | C04B 40/00                                                                            | (33) Netherlands                                                                          |
| (33) United States of America                                                                                                                         | (11) EP2794129                                                                        | (51) B03C 3/08                                                                            |
| (51) B01L 9/00                                                                                                                                        | (21) EP12809810.0                                                                     | B03C 3/12                                                                                 |
| B25J 15/08                                                                                                                                            | (47) 14.07.2021                                                                       | B03C 3/36                                                                                 |
| G01F 23/00                                                                                                                                            | (87) EP2012076233                                                                     | B03C 3/41                                                                                 |
| G01F 23/292                                                                                                                                           | 27.06.2013                                                                            | B03C 3/47                                                                                 |
| G01N 35/00                                                                                                                                            | (22) 19.12.2012                                                                       | B03C 3/86                                                                                 |
| G01N 35/02                                                                                                                                            | (54) INCREASE IN EFFICIENCY WITH<br>DEVICES FOR SIZE-SEPARATION OF<br>SOLID PARTICLES | (11) EP3204164                                                                            |
| G01N 35/04                                                                                                                                            | (73) Sika Technology AG                                                               | (21) EP15798543.3                                                                         |
| (11) EP3101428                                                                                                                                        | (72) MACKLIN, Michael                                                                 | (47) 07.07.2021                                                                           |
| (21) EP15739796.9                                                                                                                                     | MÜLLER, Thomas                                                                        | (87) IB2015001862                                                                         |
| (47) 07.07.2021                                                                                                                                       | (31) 11195090                                                                         | 14.04.2016                                                                                |
| (87) JP2015051158                                                                                                                                     | (32) 22.12.2011                                                                       | (22) 08.10.2015                                                                           |
| 30.07.2015                                                                                                                                            | (33) European Patent Office (EPO)                                                     | (54) ELECTROSTATIC FILTER FOR<br>PURIFYING A GAS FLOW                                     |
| (22) 19.01.2015                                                                                                                                       | (51) B03B 5/72                                                                        | (73) Sic S.r.l.                                                                           |
| (54) AUTOMATIC ANALYTICAL APPARATUS                                                                                                                   | H01M 10/54                                                                            | (72) ALOTTO, Piergiorgio                                                                  |
| (73) Hitachi High-Tech Corporation                                                                                                                    | H01M 4/13                                                                             | BUSELLATO, Marco                                                                          |
| (72) NODA Kazuhiro                                                                                                                                    | H01M 10/0525                                                                          | MANTOVANI, Andrea                                                                         |
| SUZUKI Yoichiro                                                                                                                                       | (11) EP3696889                                                                        | MERTENS, Daniel                                                                           |
| (31) 2014012084                                                                                                                                       | (21) EP20154867.4                                                                     | (31) PD20140261                                                                           |
| (32) 27.01.2014                                                                                                                                       | (47) 07.07.2021                                                                       | (32) 08.10.2014                                                                           |
| (33) Japan                                                                                                                                            | (22) 31.01.2020                                                                       | (33) Italy                                                                                |
| (51) B02C 4/28                                                                                                                                        | (54) METHOD AND DEVICE FOR<br>REMOVING COATINGS FROM<br>COATED FILMS                  | (51) B04B 1/08                                                                            |
| B02C 4/32                                                                                                                                             | (73) Sporer PCS GmbH parts cleaning<br>solutions                                      | B04B 5/04                                                                                 |
| B30B 3/04                                                                                                                                             | (72) Schmetzer, Andreas                                                               | B04B 7/08                                                                                 |
| B30B 15/04                                                                                                                                            | (31) 102019103424                                                                     | B04B 7/12                                                                                 |
| (11) EP3463670                                                                                                                                        | (32) 12.02.2019                                                                       | (11) EP3666385                                                                            |
| (21) EP17725942.1                                                                                                                                     | (33) Germany                                                                          | (21) EP18211240.9                                                                         |
| (47) 07.07.2021                                                                                                                                       | (51) B03B 9/04                                                                        | (47) 14.07.2021                                                                           |
| (87) EP2017062386                                                                                                                                     | C22B 7/02                                                                             | (22) 10.12.2018                                                                           |
| 30.11.2017                                                                                                                                            | (11) EP3145635                                                                        | (54) EXCHANGEABLE SEPARATION<br>INSERT AND MODULAR<br>CENTRIFUGAL SEPARATOR AND<br>METHOD |
|                                                                                                                                                       |                                                                                       | (73) Alfa Laval Corporate AB                                                              |

|                                    |                                      |                                         |
|------------------------------------|--------------------------------------|-----------------------------------------|
| (72) HÖGLUND, Kasper               | B05B 11/06                           | 20.07.2017                              |
| (51) B04B 1/08                     | (11) EP3628026                       | (22) 12.01.2017                         |
| B04B 7/08                          | (21) EP18734859.4                    | (54) SPRAY GUN CUPS, RECEPTACLES,       |
| B04B 7/12                          | (47) 07.07.2021                      | LIDS, AND METHODS OF USE                |
| B04B 9/12                          | (87) FR2018051127                    | (73) 3M Innovative Properties Company   |
| B04B 11/02                         | 08.11.2018                           | (72) HEGDAHL, Anna M.                   |
| (11) EP3666393                     | (22) 04.05.2018                      | JOSEPH, Stephen C. P.                   |
| (21) EP19199431.8                  | (54) FLUID PRODUCT DISPENSING        | ULLAH, Sabeel                           |
| (47) 14.07.2021                    | MODULE                               | (31) 201662279292 P                     |
| (22) 25.09.2019                    | (73) APTAR France SAS                | (32) 15.01.2016                         |
| (54) EXCHANGEABLE SEPARATION       | (72) BERANGER, Stéphane              | (33) United States of America           |
| INSERT AND MODULAR                 | (31) 1754003                         | (51) B05B 9/04                          |
| CENTRIFUGAL SEPARATOR              | (32) 05.05.2017                      | B05C 5/02                               |
| (73) Alfa Laval Corporate AB       | (33) France                          | (11) EP3551342                          |
| (72) HÖGLUND, Kasper               | (51) B05B 3/04                       | (21) EP18711807.0                       |
| (31) 18211241                      | (11) EP3646953                       | (47) 07.07.2021                         |
| 18211240                           | (21) EP18425083.5                    | (87) CH2018000005                       |
| (32) 10.12.2018                    | (47) 14.07.2021                      | 27.12.2018                              |
| 10.12.2018                         | (22) 05.11.2018                      | (22) 28.02.2018                         |
| (33) European Patent Office (EPO)  | (54) ROTARY JET NOZZLE ASSEMBLY FOR  | (54) DEVICE FOR UNINTERRUPTED           |
| European Patent Office (EPO)       | PRESSURE CLEANING DEVICES            | COATING OF CAN BODIES AND               |
| (51) B04B 5/00                     | (73) P.A. S.p.A.                     | OPERATING METHOD                        |
| B04B 9/12                          | (72) Benetti, Arnaldo                | (73) Soudronic AG                       |
| (11) EP3320977                     | (51) B05B 5/057                      | (72) TAIANA, Peter                      |
| (21) EP16198594.0                  | B60H 3/02                            | GAUCH, Pascal                           |
| (47) 07.07.2021                    | B64D 13/06                           | (31) 8132017                            |
| (22) 14.11.2016                    | F24F 6/12                            | (32) 21.06.2017                         |
| (54) HOUSING FOR A CENTRIFUGAL     | (11) EP3626621                       | (33) Switzerland                        |
| SEPARATOR                          | (21) EP19159241.9                    | (51) B05B 11/00                         |
| (73) Alfdex AB                     | (47) 07.07.2021                      | B05B 15/14                              |
| (72) ÖRTEGREN, Anders              | (22) 26.02.2019                      | B05B 15/65                              |
| (51) B05B 1/30                     | (54) ELECTROSTATIC ATOMIZING         | (11) EP3517217                          |
| B05B 9/01                          | APPARATUS AND ELECTROSTATIC          | (21) EP19153422.1                       |
| B05B 12/00                         | ATOMIZING METHOD                     | (47) 14.07.2021                         |
| (11) EP3454993                     | (73) Panasonic Intellectual Property | (22) 24.01.2019                         |
| (21) EP16722890.7                  | Management Co., Ltd.                 | (54) SPRAY DISPENSER WITH UNITARY       |
| (47) 07.07.2021                    | (72) KAJIYAMA, Kenichi               | SPRAYER COVER AND METHOD OF             |
| (87) EP2016060898                  | YAMAGUCHI, Takahiro                  | ASSEMBLING A SPRAY DISPENSER            |
| 16.11.2017                         | MATSUOKA, Masaru                     | (73) The Procter & Gamble Company       |
| (22) 13.05.2016                    | NODA, Yuki                           | (72) HOEFTE, Paulus Antonius Augustinus |
| (54) VALVE GUN FOR A HIGH-PRESSURE | (31) 201862734257 P                  | VANDENBERGH, Pieter Paul Dirk Jenny     |
| CLEANING DEVICE                    | (32) 21.09.2018                      | Maria                                   |
| (73) Alfred Kärcher SE & Co. KG    | (33) United States of America        | (31) 201862623683 P                     |
| (72) MAIER, Michael                | (51) B05B 7/00                       | (32) 30.01.2018                         |
| BREUER, Christoph                  | C10L 3/00                            | (33) United States of America           |
| SEITTER, Ralph                     | F16L 41/00                           | (51) B05B 14/00                         |
| KNÖDLER, Daniel                    | F16L 41/02                           | (11) EP3639931                          |
| (51) B05B 1/30                     | F16L 41/16                           | (21) EP19196572.2                       |
| B05B 9/01                          | F16L 55/07                           | (47) 14.07.2021                         |
| B05B 12/00                         | F17D 3/12                            | (22) 10.09.2019                         |
| (11) EP3454992                     | (11) EP3587539                       | (54) DEVICE FOR COATING AND METHOD      |
| (21) EP16722888.1                  | (21) EP19178844.7                    | THEREOF                                 |
| (47) 07.07.2021                    | (47) 07.07.2021                      | (73) Elmag S.P.A.                       |
| (87) EP2016060895                  | (22) 06.06.2019                      | (72) VALTORTA, Gloria                   |
| 16.11.2017                         | (54) INJECTION SYSTEM AND METHOD     | (31) 201800009428                       |
| (22) 13.05.2016                    | FOR REMOVING A NOZZLE FROM           | (32) 15.10.2018                         |
| (54) VALVE PISTOL FOR A HIGH-      | SUCH SYSTEM                          | (33) Italy                              |
| PRESSURE CLEANING DEVICE           | (73) Bilfinger EMS GmbH              | (51) B05B 15/65                         |
| (73) Alfred Kärcher SE & Co. KG    | (72) Fischer, Peter                  | (11) EP1881871                          |
| (72) MAIER, Michael                | Kubatz, Axel                         | (21) EP06741088.6                       |
| BREUER, Christoph                  | (31) 102018115845                    | (47) 07.07.2021                         |
| SEITTER, Ralph                     | (32) 29.06.2018                      | (87) AU2006000648                       |
| (51) B05B 1/34                     | (33) Germany                         | 23.11.2006                              |
| B05B 7/04                          | (51) B05B 7/24                       | (22) 16.05.2006                         |
| B05B 7/12                          | (11) EP3402602                       | (54) MANUALLY CONNECTED NOZZLE          |
| B05B 11/00                         | (21) EP17701963.5                    | ASSEMBLY                                |
| B05B 11/04                         | (47) 07.07.2021                      | (73) Spray Nozzle Engineering PTY Ltd   |
|                                    | (87) US2017013121                    | (72) MORGAN, Stuart                     |

|                                   |                                 |                                  |
|-----------------------------------|---------------------------------|----------------------------------|
| MORGAN, Sean                      | B29C 49/06                      | B65D 83/68                       |
| (31) 2005902496                   | B29L 9/00                       | (11) EP3464116                   |
| (32) 16.05.2005                   | B29L 31/00                      | (21) EP17801860.2                |
| (33) Australia                    | (11) EP3556534                  | (47) 07.07.2021                  |
| (51) B05C 1/08                    | (21) EP19179537.6               | (87) CA2017050389                |
| B32B 37/14                        | (47) 07.07.2021                 | 30.11.2017                       |
| H01L 51/56                        | (22) 23.09.2016                 | (22) 30.03.2017                  |
| (11) EP3357102                    | (54) PREFORM COATING DEVICE AND | (54) TWO AEROSOL CAN INJECTION   |
| (21) EP16770703.3                 | PREFORM COATING METHOD          | SYSTEM                           |
| (47) 14.07.2021                   | (73) Suntory Holdings Limited   | (73) Pro Form Products Limited   |
| (87) EP2016071446                 | (72) TOMARI, Ichiro             | (72) SPECK, James H.             |
| 06.04.2017                        | YAMANE, Ryo                     | (31) 201662341862 P              |
| (22) 12.09.2016                   | SUZUKI, Hideyuki                | (32) 26.05.2016                  |
| (54) METHOD FOR PRODUCING A LAYER | NISHIYAMA, Masanori             | (33) United States of America    |
| COMPOSITE                         | (31) 2015193745                 | (51) B05D 1/18                   |
| (73) ThyssenKrupp Steel Europe AG | 2015193789                      | B05D 7/14                        |
| thyssenkrupp AG                   | 2015194765                      | B32B 15/04                       |
| (72) GLASS, Roman                 | (32) 30.09.2015                 | C23C 22/53                       |
| LEWE, Tobias                      | 30.09.2015                      | C23C 22/83                       |
| (31) 102015218562                 | 30.09.2015                      | C23C 28/00                       |
| (32) 28.09.2015                   | (33) Japan                      | (11) EP3604615                   |
| (33) Germany                      | Japan                           | (21) EP18775028.6                |
| (51) B05C 5/00                    | Japan                           | (47) 14.07.2021                  |
| B41J 2/01                         | (51) B05D 1/00                  | (87) JP2018003331                |
| B41J 2/14                         | B05D 3/12                       | 04.10.2018                       |
| B41J 2/17                         | B23C 3/32                       | (22) 01.02.2018                  |
| B41J 2/175                        | B24C 1/04                       | (54) ZINC-PLATED STEEL SHEET AND |
| B41J 25/00                        | B24C 1/06                       | PRODUCTION METHOD THEREFOR       |
| B41J 25/308                       | B24C 3/32                       | (73) JFE Steel Corporation       |
| B41J 25/34                        | B24C 11/00                      | (72) FURUYA Shinichi             |
| B41J 29/02                        | B29C 70/88                      | MATSUZAKI Akira                  |
| B41J 29/08                        | B32B 1/00                       | MASUOKA Hiroyuki                 |
| B41J 29/10                        | B32B 5/26                       | HOSHINO Katsuya                  |
| B41J 29/38                        | B32B 7/12                       | (31) 2017066483                  |
| (11) EP3368321                    | B60B 5/02                       | (32) 30.03.2017                  |
| (21) EP16859877.9                 | B60R 13/08                      | (33) Japan                       |
| (47) 07.07.2021                   | C23C 4/02                       | (51) B05D 3/00                   |
| (87) JP2016081835                 | C23C 4/18                       | B05D 5/00                        |
| 04.05.2017                        | C23C 28/00                      | B05D 7/24                        |
| (22) 27.10.2016                   | C23C 4/08                       | B32B 3/00                        |
| (54) LIQUID EJECTING APPARATUS    | C23C 4/10                       | B32B 27/28                       |
| (73) Seiko Epson Corporation      | C23C 4/134                      | C03C 17/30                       |
| (72) TANABE Kentaro               | (11) EP3285935                  | C09D 5/16                        |
| KOJIMA Kenji                      | (21) EP16782403.6               | C09D 171/02                      |
| (31) 2015213575                   | (47) 07.07.2021                 | C09D 183/12                      |
| (32) 30.10.2015                   | (87) AU2016050294               | C09K 3/00                        |
| (33) Japan                        | 27.10.2016                      | C09K 3/18                        |
| (51) B05C 21/00                   | (22) 22.04.2016                 | B32B 7/02                        |
| C23C 14/04                        | (54) METHOD OF PRODUCING        | (11) EP3485985                   |
| H01L 51/00                        | THERMALLY PROTECTED             | (21) EP17827227.4                |
| H01L 51/56                        | COMPOSITE                       | (47) 07.07.2021                  |
| H05B 33/10                        | (73) Carbon Revolution Limited  | (87) JP2017017391                |
| (11) EP3581674                    | (72) SENS, Stefen               | 18.01.2018                       |
| (21) EP19177420.7                 | KWOK, Eden                      | (22) 08.05.2017                  |
| (47) 14.07.2021                   | SILCOCK, Michael, Dunbar        | (54) ANTIFOULING STRUCTURE       |
| (22) 29.05.2019                   | BRIGHTON, Aaron                 | PRECURSOR, ANTIFOULING           |
| (54) DEPOSITION MASK AND MASK     | DENMEAD, Ashley, James          | STRUCTURE, SURFACE               |
| ASSEMBLY INCLUDING THE SAME       | JONES, Nathan                   | MODIFICATION COMPOSITION, AND    |
| (73) Samsung Display Co., Ltd.    | HOWSE, Hugo                     | SURFACE MODIFICATION METHOD      |
| (72) KIM, Sanghoon                | (31) 2015901471                 | (73) Nissan Motor Co., Ltd.      |
| LEE, Seungjin                     | (32) 24.04.2015                 | (72) AKAISHI, Shinichi           |
| (31) 20180067675                  | (33) Australia                  | TSUKADA, Yoshiko                 |
| (32) 12.06.2018                   | (51) B05D 1/00                  | SUGIMOTO, Masanobu               |
| (33) Korea (Republic)             | B65B 3/04                       | SAKURAI, Daijiro                 |
| (51) B05D 1/00                    | B65B 31/00                      | NOGUCHI, Yuji                    |
| B05D 3/00                         | B65D 83/14                      | KOBAYASHI, Ryota                 |
| B29B 11/14                        | B65D 83/20                      | (31) 2016140162                  |
| B29C 49/02                        | B65D 83/42                      | (32) 15.07.2016                  |

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| (33) Japan                                 | (87) FI2018050261                    | (47) 07.07.2021                         |
| (51) B05D 7/00                             | 18.10.2018                           | (22) 06.05.2010                         |
| C09D 4/00                                  | (22) 11.04.2018                      | (54) CONVEYOR FOR TRANSPORTING          |
| C09D 5/03                                  | (54) AN APPARATUS FOR PRODUCING      | ARTICLES                                |
| (11) EP3188848                             | SOUND AND VIBRATION                  | (73) Eurosort B.V.                      |
| (21) EP15837316.7                          | (73) Flexound Systems OY             | (72) HOPMAN, Jozef Walter Maria         |
| (47) 14.07.2021                            | (72) LINJAMA, Jukka                  | VAN HAASTER, Patrick Theodorus          |
| (87) US2015048947                          | IMMONEN, Tommi                       | Johannes                                |
| 10.03.2016                                 | (31) 20174102 U                      | (51) B08B 1/00                          |
| (22) 08.09.2015                            | (32) 13.04.2017                      | H01L 21/67                              |
| (54) ROUGH TACTILE RADIATION               | (33) Finland                         | H01L 21/683                             |
| CURABLE COATING                            | (51) B07C 5/342                      | H01L 21/687                             |
| (73) Actega North America, Inc.            | (11) EP3463696                       | B24B 37/34                              |
| (72) LIN, Anshyang                         | (21) EP17726908.1                    | (11) EP2419929                          |
| WITTIG, James                              | (47) 07.07.2021                      | (21) EP10765145.7                       |
| (31) 201414478201                          | (87) EP2017062615                    | (47) 14.07.2021                         |
| (32) 05.09.2014                            | 30.11.2017                           | (87) US2010031127                       |
| (33) United States of America              | (22) 24.05.2017                      | 21.10.2010                              |
| (51) B06B 1/02                             | (54) DEVICE FOR METHOD FOR           | (22) 14.04.2010                         |
| G01N 1/28                                  | INSPECTING BULK MATERIAL             | (54) WAFER MANUFACTURING CLEANING       |
| G01N 15/02                                 | (73) SIKORA AG                       | APPARATUS, PROCESS AND METHOD           |
| G01N 29/00                                 | (72) BREMER, Klaus                   | OF USE                                  |
| (11) EP3493923                             | (31) 102016109752                    | (73) International Test Solutions, Inc. |
| (21) EP17746098.7                          | (32) 26.05.2016                      | (72) DUVALL, James H.                   |
| (47) 07.07.2021                            | (33) Germany                         | HUMPHREY, Alan E.                       |
| (87) EP2017069346                          | (51) B07C 5/342                      | BROZ, Jerry J.                          |
| 08.02.2018                                 | G01B 11/02                           | (31) 169007 P                           |
| (22) 31.07.2017                            | G01N 21/88                           | (32) 14.04.2009                         |
| (54) METHOD AND APPARATUS TO               | B31B 50/00                           | (33) United States of America           |
| IMPROVE ANALYTICAL METHOD                  | B31B 50/74                           | (51) B08B 3/00                          |
| DEVELOPMENT AND SAMPLE                     | B31B 50/98                           | E03D 5/10                               |
| PREPARATION FOR REPRODUCIBLE               | B31B 100/00                          | E03D 9/00                               |
| PARTICLE SIZE MEASUREMENT                  | B31B 110/35                          | E03D 9/08                               |
| (73) Hovione Technology Limited            | B31B 120/30                          | E03D 11/02                              |
| (72) MARTINS, Leandro                      | (11) EP3233460                       | (11) EP3438360                          |
| (31) 2016109563                            | (21) EP15817762.6                    | (21) EP17773770.7                       |
| (32) 02.08.2016                            | (47) 07.07.2021                      | (47) 07.07.2021                         |
| (33) Portugal                              | (87) EP2015025107                    | (87) JP2017005479                       |
| (51) B06B 1/02                             | 23.06.2016                           | 05.10.2017                              |
| G10K 9/12                                  | (22) 17.12.2015                      | (22) 15.02.2017                         |
| H04R 1/28                                  | (54) DEVICE AND METHOD FOR           | (54) SANITARY WASHING APPARATUS         |
| H04R 7/04                                  | CHECKING THE QUALITY                 | (73) Panasonic Intellectual Property    |
| H04R 7/18                                  | OF FOLDING BOXES AND                 | Management Co., Ltd.                    |
| H04R 19/00                                 | MANUFACTURING INSTALLATION           | (72) KATAYAMA Naoyasu                   |
| H04R 19/04                                 | COMPRISING SUCH A QUALITY-           | MATSUI Kenji                            |
| H04R 31/00                                 | CONTROL DEVICE                       | TSURUMI Naoki                           |
| (11) EP3432605                             | (73) Bobst Lyon                      | SATOI Takayuki                          |
| (21) EP17822537.1                          | (72) AMOROS, Robert                  | (31) 2016065315                         |
| (47) 07.07.2021                            | ROSSET, Benoît                       | (32) 29.03.2016                         |
| (87) CN2017085995                          | (31) 1462881                         | (33) Japan                              |
| 22.11.2018                                 | (32) 19.12.2014                      | (51) B08B 3/02                          |
| (22) 25.05.2017                            | (33) France                          | (11) EP3603828                          |
| (54) MEMS MICROPHONE                       | (51) B07C 5/36                       | (21) EP19168601.3                       |
| (73) Weifang Goertek Microelectronics Co., | (11) EP3520911                       | (47) 14.07.2021                         |
| Ltd.                                       | (21) EP18154718.3                    | (22) 11.04.2019                         |
| (72) ZHAN, Junkai                          | (47) 07.07.2021                      | (54) HIGH PRESSURE CLEANING DEVICE      |
| CAI, Mengjin                               | (22) 01.02.2018                      | FOR DIRTY COMPONENTS                    |
| ZHOU, Zonglin                              | (54) COLLECTION BIN FOR AN IN-LINE   | (73) Buchen Umweltservice GmbH          |
| (31) 201710339052                          | PRODUCT INSPECTION SYSTEM,           | (72) Seik, Kevin                        |
| (32) 15.05.2017                            | AND IN-LINE PRODUCT INSPECTION       | Sterzenbach, Patrick                    |
| (33) China                                 | SYSTEM                               | Noack, Jens                             |
| (51) B06B 1/14                             | (73) Mettler-Toledo Safeline Limited | (31) 102018118829                       |
| G10K 9/12                                  | (72) KANIA, Michal                   | (32) 02.08.2018                         |
| G10K 9/22                                  | (51) B07C 5/36                       | (33) Germany                            |
| H04R 9/06                                  | B07C 7/00                            | (51) B08B 3/02                          |
| (11) EP3610658                             | B65G 47/38                           | B08B 9/00                               |
| (21) EP18727341.2                          | (11) EP3153243                       | F01D 25/00                              |
| (47) 07.07.2021                            | (21) EP16198227.7                    | F02C 7/00                               |

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| (11) EP3236019                     | B29C 49/24                         | (87) EP2016082739                        |
| (21) EP17160658.5                  | B29C 51/16                         | 06.07.2017                               |
| (47) 14.07.2021                    | B29C 63/00                         | (22) 28.12.2016                          |
| (22) 13.03.2017                    | B29K 23/00                         | (54) A PROCESS OF PRODUCING A            |
| (54) METHOD FOR IN-FLIGHT CLEANING | B29K 67/00                         | DUPLEX STAINLESS STEEL TUBE              |
| OF A GAS TURBINE ENGINE AND        | B29K 105/00                        | (73) Sandvik Intellectual Property AB    |
| GAS TURBINE ENGINE CONFIGURED      | B29K 105/16                        | (72) KÖNBERG, Erik                       |
| THEREFOR                           | B29L 9/00                          | SVEDBERG, Daniel                         |
| (73) General Electric Company      | B29L 31/00                         | (31) 15203149                            |
| (72) FLYNN, Peter Andrew           | (11) EP2807014                     | (32) 30.12.2015                          |
| ERIKSEN, Michael Edward            | (21) EP13704219.8                  | (33) European Patent Office (EPO)        |
| RAWSON, Lloyd Eric                 | (47) 07.07.2021                    | (51) B21B 37/76                          |
| (31) 201615071254                  | (87) GB2013050172                  | (11) EP3623068                           |
| (32) 16.03.2016                    | 01.08.2013                         | (21) EP18193920.8                        |
| (33) United States of America      | (22) 25.01.2013                    | (47) 14.07.2021                          |
| (51) B08B 9/027                    | (54) IN-MOULD LABELLING PROCESS    | (22) 12.09.2018                          |
| C11D 3/04                          | (73) Innovia Films Limited         | (54) APPLICATION DEVICES FOR             |
| C11D 3/20                          | Alpa Werke Alwin Lehner GmbH & Co. | COOLING LINES WITH SECOND                |
| C11D 3/43                          | KG                                 | CONNECTION                               |
| C11D 7/08                          | (72) LANGSTAFF, Stephen            | (73) Primetals Technologies Germany GmbH |
| C11D 7/50                          | KONKEL, Christopher                | (72) Weinzierl, Klaus                    |
| C11D 11/00                         | SIEGL, Robert                      | (51) B21C 35/04                          |
| H01L 21/02                         | (31) 201201431                     | B21C 35/06                               |
| H01L 21/027                        | (32) 27.01.2012                    | B29C 48/25                               |
| H01L 21/304                        | (33) United Kingdom                | B29C 48/27                               |
| H01L 21/31                         | (51) B08B 15/02                    | (11) EP3651967                           |
| H01L 21/67                         | B22F 3/105                         | (21) EP18733684.7                        |
| (11) EP2876669                     | B29C 64/364                        | (47) 07.07.2021                          |
| (21) EP13820182.7                  | B33Y 40/00                         | (87) IB2018053875                        |
| (47) 07.07.2021                    | (11) EP3560715                     | 17.01.2019                               |
| (87) JP2013068644                  | (21) EP18169441.5                  | (22) 31.05.2018                          |
| 23.01.2014                         | (47) 07.07.2021                    | (54) METHOD FOR CLEANING AN              |
| (22) 08.07.2013                    | (22) 26.04.2018                    | EXTRUSION DIE                            |
| (54) CLEANING FLUID FOR            | (54) MODELING APPARATUS            | (73) Isinnova S.r.l.                     |
| SEMICONDUCTOR, AND CLEANING        | (73) Nabtesco Corporation          | (72) MASSARI, Marco                      |
| METHOD USING SAME                  | (72) ISHIYAMA, Shigetoshi          | TORTELLI, Matteo                         |
| (73) Nissan Chemical Corporation   | KATO, Tomotsugu                    | TORTELLI, Marco                          |
| (72) SASSA, Suguru                 | KITAMURA, Mitsuhsa                 | FRACASSI, Cristian                       |
| SHIGAKI, Shuhei                    | TOMIE, Takashi                     | (31) 201700080011                        |
| (31) 2012160884                    | TSUCHIDA, Kenichi                  | (32) 14.07.2017                          |
| (32) 19.07.2012                    | (51) B21B 1/08                     | (33) Italy                               |
| (33) Japan                         | B62D 21/15                         | (51) B21C 37/083                         |
| (51) B08B 9/043                    | B62D 25/04                         | B21C 37/15                               |
| B08B 9/045                         | B62D 25/06                         | B21H 8/00                                |
| B24B 5/40                          | B62D 29/00                         | F28F 3/08                                |
| E03F 9/00                          | (11) EP3239023                     | (11) EP2524185                           |
| (11) EP3592478                     | (21) EP15873623.1                  | (21) EP10843354.1                        |
| (21) EP18710051.6                  | (47) 14.07.2021                    | (47) 14.07.2021                          |
| (47) 07.07.2021                    | (87) KR2015014120                  | (87) US2010002363                        |
| (87) EP2018055911                  | 30.06.2016                         | 21.07.2011                               |
| 13.09.2018                         | (22) 22.12.2015                    | (22) 27.08.2010                          |
| (22) 09.03.2018                    | (54) PILLAR MEMBER AND ROLL FORMED | (54) METHOD OF FORMING AN                |
| (54) GRINDING AND CLEANING TOOL    | MEMBER OF VEHICLE                  | ENHANCED-SURFACE WALL FOR USE            |
| FOR GRINDING AND CLEANING THE      | (73) POSCO                         | IN AN APPARATUS                          |
| INSIDE OF TUBING AND PIPES         | (72) KIM, Don-Gun                  | (73) Rigidized Metals Corporation        |
| (73) Dakki AB                      | CHOI, Han-Ho                       | (72) SMITH, III, Richard, S.             |
| (72) OVSIANNIKOW, Maria            | (31) 20140186098                   | FULLER, Kevin                            |
| OVSIANNIKOW, Peter                 | (32) 22.12.2014                    | KUKULKA, David, J.                       |
| (31) 1750276                       | (33) Korea (Republic)              | (31) 295653 P                            |
| (32) 10.03.2017                    | (51) B21B 21/00                    | (32) 15.01.2010                          |
| (33) Sweden                        | B21C 1/22                          | (33) United States of America            |
| (51) B08B 9/08                     | B21C 23/08                         | (51) B21C 37/18                          |
| B08B 9/22                          | C21D 8/10                          | B21D 22/14                               |
| B29B 17/02                         | C22C 38/00                         | B21D 37/16                               |
| B29C 43/18                         | C22C 38/58                         | B21D 39/10                               |
| B29C 45/14                         | (11) EP3397406                     | B21D 41/02                               |
| B29C 45/16                         | (21) EP16822199.2                  | (11) EP3431205                           |
| B29C 45/27                         | (47) 07.07.2021                    | (21) EP16894259.7                        |

|                                        |                                        |                                       |
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| (47) 14.07.2021                        | (54) PRESS-FORMED PRODUCT,             | (11) EP3088096                        |
| (87) JP2016001438                      | AUTOMOBILE STRUCTURAL MEMBER           | (21) EP15165673.3                     |
| 21.09.2017                             | INCLUDING THE SAME, PRODUCTION         | (47) 07.07.2021                       |
| (22) 14.03.2016                        | METHOD AND PRODUCTION DEVICE           | (22) 29.04.2015                       |
| (54) TUBE DIAMETER EXPANDING           | FOR THE PRESS-FORMED PRODUCT           | (54) DEVICES AND METHOD FOR           |
| METHOD AND FORMING APPARATUS           | (73) Nippon Steel Corporation          | THE PRESSURE FORMING OF               |
| (73) Kawasaki Jukogyo Kabushiki Kaisha | (72) ITO, Yasuhiro                     | CONNECTOR BRIDGES BETWEEN             |
| (72) IKAWA, Ken                        | NAKAZAWA, Yoshiaki                     | PARTS OF A BOARD-SHAPED               |
| IMAMURA, Yoshihide                     | (31) 2014080448                        | WORKPIECE                             |
| MIKAMI, Kohei                          | (32) 09.04.2014                        | (73) TRUMPF Werkzeugmaschinen GmbH +  |
| IWASAKI, Hayato                        | (33) Japan                             | Co. KG                                |
| HIRAKAWA, Takeo                        | (51) B21D 22/02                        | (72) Klinkhammer, Marc                |
| (51) B21C 47/24                        | B21D 43/00                             | Wilhelm, Markus                       |
| (11) EP3386658                         | B21D 53/78                             | Abiko, Takeshi                        |
| (21) EP16829153.2                      | B23P 15/00                             | (51) B21D 28/24                       |
| (47) 14.07.2021                        | (11) EP3254776                         | B21D 39/03                            |
| (87) US2016064918                      | (21) EP17171309.2                      | B21J 5/06                             |
| 15.06.2017                             | (47) 07.07.2021                        | B21K 25/00                            |
| (22) 05.12.2016                        | (22) 16.05.2017                        | F16B 25/10                            |
| (54) COIL VIBRATION SYSTEM             | (54) DATUM POSITIONING OF A            | (11) EP3645189                        |
| (73) Primetals Technologies USA LLC    | COMPONENT TO BE HOT FORMED IN          | (21) EP18725490.9                     |
| (72) SPENCER, Steven                   | DIES                                   | (47) 07.07.2021                       |
| (31) 201562263928 P                    | (73) Rolls-Royce plc                   | (87) EP2018062744                     |
| (32) 07.12.2015                        | (72) Summers, Timothy                  | 03.01.2019                            |
| (33) United States of America          | Savings, David                         | (22) 16.05.2018                       |
| (51) B21D 3/16                         | (31) 201609988                         | (54) METHOD FOR PRODUCING A STEEL     |
| B21D 41/02                             | (32) 08.06.2016                        | COMPONENT ASSEMBLY AND STEEL          |
| B23K 9/29                              | (33) United Kingdom                    | COMPONENT ASSEMBLY                    |
| (11) EP3068570                         | (51) B21D 22/14                        | (73) Bayerische Motoren Werke         |
| (21) EP14812335.9                      | B21D 37/16                             | Aktiengesellschaft                    |
| (47) 14.07.2021                        | (11) EP3130411                         | (72) EBERHARDT, Florian               |
| (87) US2014065487                      | (21) EP15776232.9                      | KOPP, Christine Maria                 |
| 21.05.2015                             | (47) 14.07.2021                        | SCHMIDT, Uwe                          |
| (22) 13.11.2014                        | (87) JP2015001905                      | SPÖRER, Josef                         |
| (54) METHOD OF COOLING A CONTACT       | 15.10.2015                             | ZEHENTBAUER, Siegfried Georg          |
| TIP OF AN ARC WELDING APPARATUS        | (22) 03.04.2015                        | (31) 102017210864                     |
| (73) Victor Equipment Company          | (54) SPINNING FORMING DEVICE           | (32) 28.06.2017                       |
| (72) HASSAN, Khalid                    | (73) Kawasaki Jukogyo Kabushiki Kaisha | (33) Germany                          |
| (31) 201361903950 P                    | (72) SAKANE, Yuto                      | (51) B21D 37/04                       |
| 201462053784 P                         | IMAMURA, Yoshihide                     | B21J 15/02                            |
| (32) 13.11.2013                        | MIKAMI, Kohei                          | B21J 15/10                            |
| 22.09.2014                             | KABE, Yoshiro                          | B21J 15/36                            |
| (33) United States of America          | IWASAKI, Hayato                        | B23B 31/103                           |
| United States of America               | KITANO, Hiroshi                        | B23Q 3/155                            |
| (51) B21D 5/02                         | (31) 2014080696                        | (11) EP3093080                        |
| (11) EP2364228                         | (32) 10.04.2014                        | (21) EP16166640.9                     |
| (21) EP09765172.3                      | (33) Japan                             | (47) 14.07.2021                       |
| (47) 07.07.2021                        | (51) B21D 22/22                        | (22) 22.04.2016                       |
| (87) NL2009000216                      | B21D 37/01                             | (54) DIE CHANGER WITH REPLACEABLE     |
| 20.05.2010                             | B21D 37/20                             | DIE AND DIE DOME ADAPTED              |
| (22) 11.11.2009                        | B23P 15/24                             | THERETO AND METHOD FOR                |
| (54) DEVICE FOR CLAMPING A TOOL        | (11) EP3254780                         | REMOVAL AND INSERTION OF THE          |
| (73) Wila B.V.                         | (21) EP17000814.8                      | REPLACEABLE DIE                       |
| (72) ROUWELER, Franciscus, Wilhelmus   | (47) 07.07.2021                        | (73) Böllhoff Verbindungstechnik GmbH |
| PETERS, Jan                            | (22) 11.05.2017                        | (72) Ahlemeyer, Fabian                |
| HOLTERMAN, Jan                         | (54) METHOD FOR PRODUCING A METAL      | Peters, Peter                         |
| (31) 2002198                           | PROCESSING TOOL                        | (31) 102015107337                     |
| (32) 11.11.2008                        | (73) AUDI AG                           | (32) 11.05.2015                       |
| (33) Netherlands                       | (72) Canti, Robert                     | (33) Germany                          |
| (51) B21D 19/08                        | Sanhieter, Stefan                      | (51) B21D 37/14                       |
| B21D 22/26                             | Disch, Christian                       | B21D 39/04                            |
| B21D 53/88                             | Noneder, Johannes                      | B21J 7/14                             |
| (11) EP3130409                         | (31) 102016007037                      | B21J 13/08                            |
| (21) EP15776081.0                      | (32) 08.06.2016                        | B30B 7/04                             |
| (47) 14.07.2021                        | (33) Germany                           | B30B 15/02                            |
| (87) JP2015001561                      | (51) B21D 28/10                        | (11) EP3612378                        |
| 15.10.2015                             | B21D 28/16                             | (21) EP18717341.4                     |
| (22) 20.03.2015                        | B21D 28/34                             | (47) 07.07.2021                       |

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| (51) B21D 39/00<br>B21J 9/02<br>B21K 1/05<br>B21K 25/00<br>B60B 35/02<br>F16C 19/18<br>F16C 25/08<br>F16C 35/063<br>F16C 41/00<br>F16C 43/04<br>(11) EP3575013<br>(21) EP19754239.2<br>(47) 14.07.2021<br>(87) JP2019005060<br>22.08.2019<br>(22) 13.02.2019<br>(54) DYNAMIC LOAD MEASURING<br>METHOD FOR ROCKING-<br>DIE FORGING APPARATUS,<br>DYNAMIC LOAD MEASURING<br>APPARATUS, CALIBRATION METHOD<br>FOR ROCKING-DIE FORGING<br>APPARATUS, HUB-UNIT-BEARING<br>MANUFACTURING METHOD, AND<br>VEHICLE MANUFACTURING METHOD<br>(73) NSK Ltd.<br>(72) HAGIWARA Nobuyuki<br>(31) 2018023141<br>(32) 13.02.2018<br>(33) Japan | (51) B21D 53/06<br>F28D 7/02<br>F28F 1/40<br>F28F 13/12<br>(11) EP3722729<br>(21) EP17934163.1<br>(47) 07.07.2021<br>(87) JP2017043818<br>13.06.2019<br>(22) 06.12.2017<br>(54) HEAT EXCHANGER, REFRIGERATION<br>CYCLE DEVICE, AND METHOD FOR<br>MANUFACTURING HEAT EXCHANGER<br>(73) Mitsubishi Electric Corporation<br>(72) MURATA, Kenta<br>KOIDE, Toru<br>HATANAKA, Kensaku<br>KAWAI, Takahiko<br>OTA, Toshiaki<br>(51) B21H 1/18<br>B21H 3/02<br>B21H 3/04<br>B21K 1/56<br>(11) EP3523066<br>(21) EP17859251.5<br>(47) 07.07.2021<br>(87) US2017055516<br>12.04.2018<br>(22) 06.10.2017<br>(54) CYLINDRICAL TOOL MATCHING<br>SYSTEM<br>(73) Reed Machinery, Inc.<br>(72) FLANAGAN, James, D.<br>COPELAND, Steven, B.<br>KETTLES, Adam, M.<br>FAUCHER, Brian, R.<br>WHITE, Patrick, G.<br>MORSE, Cody, F.<br>ARSENAULT, Kenneth, F.<br>(31) 201662405496 P<br>(32) 07.10.2016<br>(33) United States of America | (51) B22C 3/00<br>B22C 9/10<br>B22C 9/12<br>C23C 16/06<br>F01D 5/12<br>(11) EP3482846<br>(21) EP18210071.9<br>(47) 14.07.2021<br>(22) 28.10.2014<br>(54) COATED CASTING CORES AND<br>MANUFACTURE METHODS<br>(73) Raytheon Technologies Corporation<br>(72) CASTLE, Lea K.<br>SPANGLER, Brandon W.<br>(31) 201361905542 P<br>(32) 18.11.2013<br>(33) United States of America                                |
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| (22) 19.04.2013                                                                                                                                         | (32) 06.05.2007                                                                                                                                     | (51) B22F 1/02                                                                               |
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| (73) Raytheon Technologies Corporation                                                                                                                  | (33) United States of America                                                                                                                       | B23K 103/00                                                                                  |
| (72) PROPHETER-HINCKLEY, Tracy A.<br>ZELESKY, Mark F.<br>MONGILLO, JR., Dominic J.<br>DEVORE, Matthew A.<br>GAUTSCHI, Steven Bruce<br>FISK, Benjamin T. | United States of America                                                                                                                            | B23K 103/08                                                                                  |
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| (51) B22C 9/06                                                                                                                                          | (21) EP17811506.9                                                                                                                                   | C04B 35/628                                                                                  |
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| (47) 07.07.2021                                                                                                                                         | (73) SMS Group GmbH                                                                                                                                 | B33Y 30/00                                                                                   |
| (87) AT2018060242                                                                                                                                       | (72) BÖCKING, Sebastian                                                                                                                             | B33Y 70/00                                                                                   |
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| (54) CASTING DEVICE FOR CASTING<br>UNDER PRESSURE                                                                                                       | (32) 30.11.2016                                                                                                                                     | (47) 07.07.2021                                                                              |
| (73) Fill Gesellschaft m.b.H.                                                                                                                           | (33) Germany                                                                                                                                        | (87) US2015012484                                                                            |
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| (33) Austria                                                                                                                                            | (11) EP3075465                                                                                                                                      | (73) Raytheon Technologies Corporation                                                       |
| (51) B22C 9/12                                                                                                                                          | (21) EP14865968.3                                                                                                                                   | (72) NARDI, Aaron T.                                                                         |
| F26B 3/347                                                                                                                                              | (47) 14.07.2021                                                                                                                                     | DARDAS, Zissis                                                                               |
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| (22) 13.06.2018                                                                                                                                         | (54) DEVICE AND PROCESS FOR CASTING<br>FORMING OF AMORPHOUS ALLOY<br>COMPONENT                                                                      | (51) B22F 3/03                                                                               |
| (54) METHOD AND INSTALLATION FOR<br>MAKING SAND CORES                                                                                                   | (73) Institute of Metal Research Chinese<br>Academy of Sciences<br>Dongguan Eontec Co., Ltd.                                                        | B30B 11/00                                                                                   |
| (73) Loramendi, S.COOP.                                                                                                                                 | (72) FU, Huameng                                                                                                                                    | B30B 11/02                                                                                   |
| (72) FERNANDEZ ORIVE, Luis Alfonso                                                                                                                      | ZHANG, Haifeng                                                                                                                                      | B30B 15/02                                                                                   |
| (51) B22D 11/06                                                                                                                                         | WANG, Aimin                                                                                                                                         | B22F 3/00                                                                                    |
| B22D 11/124                                                                                                                                             | ZHU, Zhengwang                                                                                                                                      | (11) EP3349925                                                                               |
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| (47) 07.07.2021                                                                                                                                         | (51) B22D 41/28                                                                                                                                     | MAASSEN, Robert                                                                              |
| (87) US2008062783                                                                                                                                       | B22D 41/30                                                                                                                                          | ERNST, Eberhard                                                                              |
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| (54) AN AGE HARDENED THIN CAST<br>STRIP PRODUCT WITH MICROALLOY<br>ADDITIONS, AND METHOD FOR<br>MAKING THE SAME                                         | (11) EP3530376                                                                                                                                      | (32) 18.09.2015                                                                              |
| (73) Nucor Corporation                                                                                                                                  | (21) EP17862513.3                                                                                                                                   | (33) Germany                                                                                 |
| (72) WILLIAMS, James, Geoffery<br>KAUL, Harold, Roland<br>EDELMAN, Daniel, Geoffrey<br>KILLMORE, Christopher, Ronald                                    | (47) 14.07.2021                                                                                                                                     | (51) B22F 3/105                                                                              |
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|                                                                                                                                                         | (73) Krosakiharima Corporation                                                                                                                      | (11) EP3428983                                                                               |
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|                                                                                                                                                         |                                                                                                                                                     | (54) METHOD FOR PRODUCING<br>THERMOELECTRIC CONVERSION<br>MATERIAL                           |
|                                                                                                                                                         |                                                                                                                                                     | (73) Furukawa Co., Ltd.                                                                      |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (72) TOMIDA Taketoshi<br>SUZUKI Shogo<br>SUMIYOSHI Atsuro<br>NIE Ge<br>OCHI Takahiro<br>KIKUCHI Masaaki<br>GUO Junqing<br>(31) 2016043195<br>(32) 07.03.2016<br>(33) Japan                                                                                                                                                                                                                                                                                                                                   | (72) MILLER, Samuel Noah<br>(31) 201715493676<br>(32) 21.04.2017<br>(33) United States of America                                                                                                                                                                                                                                                                                                                                                                                                                                                     | SAME IN METHODS FOR JOINING<br>STRUCTURAL ELEMENTS BY MEANS<br>OF PRESSURE SINTERING                                                                                                                                                                                                                                                                                                                                       |
| (51) B22F 3/105<br>B33Y 10/00<br>B33Y 30/00<br>B29C 64/153<br>B29C 64/371<br>(11) EP3321009<br>(21) EP17185010.0<br>(47) 07.07.2021<br>(22) 04.08.2017<br>(54) APPARATUS FOR ADDITIVE<br>MANUFACTURING OF THREE-<br>DIMENSIONAL OBJECTS<br>(73) CL Schutzrechtsverwaltungs GmbH<br>(72) Dressel, Tobias<br>Diller, Christian<br>Engel, Viktor<br>Bechmann, Florian<br>(31) 102016121770<br>(32) 14.11.2016<br>(33) Germany                                                                                   | (51) B22F 3/11<br>B22F 5/10<br>C22C 1/04<br>C22C 1/08<br>C22C 1/10<br>C22C 9/06<br>C22C 19/00<br>C22C 19/03<br>C22C 30/02<br>C22C 30/04<br>(11) EP3192884<br>(21) EP15839255.5<br>(47) 07.07.2021<br>(87) JP2015075751<br>17.03.2016<br>(22) 10.09.2015<br>(54) SINTERED SLIDING MEMBER<br>HAVING EXCEPTIONAL CORROSION<br>RESISTANCE, HEAT RESISTANCE,<br>AND WEAR RESISTANCE; AND<br>METHOD FOR PRODUCING SAID<br>MEMBER<br>(73) Diamet Corporation<br>(72) TAKEZOE Shinichi<br>ISHII Yoshinari<br>(31) 2014185453<br>(32) 11.09.2014<br>(33) Japan | (73) Heraeus Deutschland GmbH & Co. KG<br>(72) SCHÄFER, Michael<br>SCHMITT, Wolfgang<br>(31) 14178758<br>(32) 28.07.2014<br>(33) European Patent Office (EPO)                                                                                                                                                                                                                                                              |
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| (21) EP18191135.5                         | LI, Chenglong                                    | B26D 7/06                            |
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| (54) METHODS FOR MANUFACTURING            | (32) 12.07.2017                                  | G05B 19/402                          |
| COMPONENTS HAVING SPATIALLY               | (33) China                                       | G05B 19/418                          |
| GRADED PROPERTIES                         | (51) B23C 5/06                                   | (11) EP3174666                       |
| (73) The Boeing Company                   | B23C 5/22                                        | (21) EP15828185.7                    |
| (72) YOUSEFIANI, Ali                      | (11) EP3045246                                   | (47) 07.07.2021                      |
| SENDEROS, Bruno Zamorano                  | (21) EP15151160.7                                | (87) US2015042979                    |
| COAD, Dennis Lynn                         | (47) 14.07.2021                                  | 04.02.2016                           |
| BOCCHINI, Peter J.                        | (22) 14.01.2015                                  | (22) 30.07.2015                      |
| (31) 201762554199 P                       | (54) A cutting insert and a milling cutting tool | (54) DYNAMICALLY DIRECTED            |
| 201715833177                              | (73) Sandvik Intellectual Property AB            | WORKPIECE POSITIONING SYSTEM         |
| (32) 05.09.2017                           | (72) Rué, Marc                                   | (73) USNR, LLC                       |
| 06.12.2017                                | Sarton, Yannick                                  | (72) MIDDLETON, Garyland Kirk        |
| (33) United States of America             | (51) B23D 21/04                                  | NORTON, Scott Erling                 |
| United States of America                  | B23D 45/12                                       | BLOMQUIST, Christopher W.            |
| (51) B23B 15/00                           | (11) EP3621762                                   | (31) 201462031639 P                  |
| B23Q 7/04                                 | (21) EP18725005.5                                | (32) 31.07.2014                      |
| B23Q 11/08                                | (47) 07.07.2021                                  | (33) United States of America        |
| (11) EP3205447                            | (87) NL2018050294                                | (51) B23F 23/12                      |
| (21) EP15849385.8                         | 18.10.2018                                       | B24B 53/07                           |
| (47) 07.07.2021                           | (22) 04.05.2018                                  | B24B 53/075                          |
| (87) JP2015075673                         | (54) ROTARY CUTTING DEVICE                       | (11) EP3251794                       |
| 14.04.2016                                | (73) Verhuur- En Loonbedrijf Schuurman B.V.      | (21) EP17000824.7                    |
| (22) 10.09.2015                           | (72) SCHUURMAN, Gerbrand Arjan                   | (47) 07.07.2021                      |
| (54) WORKPIECE SUPPLY DEVICE AND          | SCHOONHOVEN, Barend Cornelis                     | (22) 15.05.2017                      |
| MACHINE TOOL                              | (31) 2018869                                     | (54) METHOD OF ALIGNING A MULTI-GEAR |
| (73) Citizen Watch Co., Ltd.              | (32) 08.05.2017                                  | GRINDING WORM BY MEANS OF AN         |
| Citizen Machinery Co., Ltd.               | (33) Netherlands                                 | ALIGNMENT ROLLER                     |
| (72) ITOH, Shingo                         | (51) B23D 29/00                                  | (73) Kapp Werkzeugmaschinen GmbH     |
| (31) 2014206538                           | B23D 35/00                                       | NILES Werkzeugmaschinen GmbH         |
| (32) 07.10.2014                           | B26B 15/00                                       | (72) Müller, Frank                   |
| (33) Japan                                | (11) EP3405314                                   | (31) 102016006673                    |
| (51) B23B 31/11                           | (21) EP17700397.7                                | (32) 31.05.2016                      |
| B23B 51/04                                | (47) 14.07.2021                                  | (33) Germany                         |
| F16D 1/108                                | (87) EP2017050332                                | (51) B23G 7/02                       |
| F16D 1/116                                | 27.07.2017                                       | C23C 14/06                           |
| (11) EP3172002                            | (22) 09.01.2017                                  | C23C 30/00                           |
| (21) EP15738708.5                         | (54) MOTOR-OPERATED SHEARS                       | (11) EP2918362                       |
| (47) 07.07.2021                           | (73) Gustav Klauke GmbH                          | (21) EP12887999.6                    |
| (87) EP2015066723                         | (72) LEHR, Andreas                               | (47) 07.07.2021                      |
| 28.01.2016                                | (31) 102016100940                                | (87) JP2012078897                    |
| (22) 22.07.2015                           | (32) 20.01.2016                                  | 15.05.2014                           |
| (54) TOOLHOLDER FOR THE                   | (33) Germany                                     | (22) 07.11.2012                      |
| CONNECTION OF A DRILLING UNIT             | (51) B23D 45/10                                  | (54) HARD FILM-COATED CUTTING TOOL   |
| WITH A HOLLOW DIAMOND DRILLING            | B28D 1/00                                        | (73) OSG Corporation                 |
| TOOL                                      | B28D 1/04                                        | (72) TOIHARA Takaomi                 |
| (73) Hilti Aktiengesellschaft             | B28D 1/22                                        | (51) B23H 1/00                       |
| (72) REICHENBERGER, Thomas                | B28D 1/24                                        | F16C 19/02                           |
| RIED, Xaver                               | (11) EP3603913                                   | F16C 19/22                           |
| (31) 14177933                             | (21) EP19188784.3                                | F16C 33/58                           |
| (32) 22.07.2014                           | (47) 07.07.2021                                  | F16C 33/64                           |
| (33) European Patent Office (EPO)         | (22) 29.07.2019                                  | (11) EP3438479                       |
| (51) B23C 3/35                            | (54) CUTTING AND CHAMFERING HEAD,                | (21) EP18186836.5                    |
| (11) EP3427879                            | MULTIAXIAL MACHINE WITH SUCH A                   | (47) 07.07.2021                      |
| (21) EP18161855.4                         | CUTTING AND CHAMFERING HEAD                      | (22) 01.08.2018                      |
| (47) 07.07.2021                           | AND CUTTING AND CHAMFERING                       | (54) BEARING ASSEMBLIES WITH         |
| (22) 14.03.2018                           | METHOD                                           | ELECTRODYNAMICALLY MATCHED           |
| (54) FIXTURE FOR KEY CUTTING              | (73) Donatoni, Giorgio                           | RACES                                |
| MACHINE AND KEY CUTTING                   | (72) Donatoni, Giorgio                           | (73) Goodrich Corporation            |
| MACHINE                                   | (31) 201800007773                                | (72) BIALKE, William Edward          |
| (73) Shenzhen Xhorse Electronics Co., Ltd | (32) 02.08.2018                                  | HANSELL, Eric                        |
| (72) XI, Yongfeng                         | (33) Italy                                       | (31) 201715668663                    |
| HAN, Shitting                             | (51) B23D 59/00                                  | (32) 03.08.2017                      |
| HAO, Yijie                                |                                                  | (33) United States of America        |

|                                              |                                                |                                         |
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| (51) B23K 1/00                               | (21) EP16886233.2                              | (32) 02.05.2016                         |
| B23K 1/012                                   | (47) 14.07.2021                                | (33) United States of America           |
| B23K 1/20                                    | (87) JP2016005226                              | (51) B23K 11/00                         |
| B23K 35/02                                   | 27.07.2017                                     | B23K 11/093                             |
| B23K 35/28                                   | (22) 27.12.2016                                | B23K 33/00                              |
| B23K 101/14                                  | (54) PULSE ARC WELDING CONTROL                 | G21C 3/10                               |
| B23K 103/10                                  | METHOD AND PULSE ARC WELDING                   | G21C 21/02                              |
| B32B 15/01                                   | DEVICE                                         | (11) EP3526800                          |
| C22C 21/02                                   | (73) Panasonic Intellectual Property           | (21) EP17890828.1                       |
| F28F 1/12                                    | Management Co., Ltd.                           | (47) 07.07.2021                         |
| F28F 21/08                                   | (72) FUJIWARA, Junji                           | (87) US2017056136                       |
| (11) EP2883650                               | (31) 2016009420                                | 12.07.2018                              |
| (21) EP13197108.7                            | (32) 21.01.2016                                | (22) 11.10.2017                         |
| (47) 14.07.2021                              | (33) Japan                                     | (54) RESISTANCE PRESSURE WELD FOR       |
| (22) 13.12.2013                              | (51) B23K 9/09                                 | NUCLEAR REACTOR FUEL ROD TUBE           |
| (54) Fluxless joining of aluminium composite | B23K 9/10                                      | END PLUG                                |
| materials                                    | H02M 3/158                                     | (73) BWXT mPower, Inc.                  |
| (73) Hydro Aluminium Rolled Products GmbH    | H02M 3/24                                      | (72) BARGER, Earl Brian                 |
| (72) Eckhard, Kathrin                        | H02M 3/28                                      | FITZNER, Scott L.                       |
| Güßgen, Olaf                                 | H02M 3/335                                     | LEE, Jeffrey T.                         |
| Janssen, Hartmut                             | (11) EP3613529                                 | RIDGEWAY, Roger D.                      |
| (51) B23K 1/00                               | (21) EP19203571.5                              | (31) 201615290628                       |
| B23K 1/20                                    | (47) 07.07.2021                                | (32) 11.10.2016                         |
| B23K 3/08                                    | (22) 05.12.2016                                | (33) United States of America           |
| B23K 37/04                                   | (54) WELDING POWER SUPPLY                      | (51) B23K 15/00                         |
| B23K 101/42                                  | WITH EXTENDED VOLTAGE                          | F16K 17/14                              |
| H05K 3/32                                    | CHARACTERISTIC                                 | F16K 17/16                              |
| H05K 3/34                                    | (73) ESAB AB                                   | F16K 17/40                              |
| (11) EP3618993                               | (72) Mnich, Andrzej                            | (11) EP3371492                          |
| (21) EP18722992.7                            | (31) PCT/IB2015/059601                         | (21) EP16863095.2                       |
| (47) 07.07.2021                              | (32) 14.12.2015                                | (47) 07.07.2021                         |
| (87) EP2018061727                            | (33) World Intellectual Property Office (WIPO) | (87) US2016060667                       |
| 08.11.2018                                   | (51) B23K 9/23                                 | 11.05.2017                              |
| (22) 07.05.2018                              | B23K 35/00                                     | (22) 04.11.2016                         |
| (54) METHOD OF PRODUCING A SOLDER            | B23K 35/02                                     | (54) RUPTURE DISC DEVICE AND            |
| CONNECTION OF COMPONENTS                     | B23K 35/30                                     | METHOD OF ASSEMBLY THEREOF              |
| USING ADHESIVE MATERIAL FOR                  | B23K 35/38                                     | (73) Oklahoma Safety Equipment Company, |
| TEMPORARY CONNECTION OF THE                  | B23K 103/04                                    | Inc.                                    |
| COMPONENTS                                   | B23K 103/10                                    | (72) WILSON, Alan T.                    |
| (73) PINK GmbH Thermosysteme                 | C22C 38/02                                     | FRANKS, Hunter                          |
| (72) HUTZLER, Aaron                          | C22C 38/22                                     | HENTZEN, Brandon                        |
| OETZEL, Christoph                            | C22C 38/38                                     | KMITTA, Michael                         |
| (31) 102017109747                            | C22C 38/44                                     | BLACKMON, Mark Randall                  |
| 202017105174 U                               | C22C 38/48                                     | EVANS, Robert                           |
| (32) 05.05.2017                              | C22C 38/50                                     | (31) 201562252176 P                     |
| 28.08.2017                                   | C22C 38/58                                     | 201662281016 P                          |
| (33) Germany                                 | (11) EP3452248                                 | (32) 06.11.2015                         |
| Germany                                      | (21) EP17793187.0                              | 20.01.2016                              |
| (51) B23K 9/022                              | (47) 14.07.2021                                | (33) United States of America           |
| B23K 9/28                                    | (87) US2017030689                              | United States of America                |
| B23K 9/30                                    | 09.11.2017                                     | (51) B23K 20/12                         |
| B23K 37/02                                   | (22) 02.05.2017                                | B23K 37/02                              |
| (11) EP3682995                               | (54) FIELD DISSIMILAR METAL WELDING            | B23K 37/04                              |
| (21) EP19170406.3                            | TECHNOLOGY FOR ENHANCED                        | (11) EP2812146                          |
| (47) 14.07.2021                              | WEAR RESISTANT HIGH MANGANESE                  | (21) EP12868066.7                       |
| (22) 19.04.2019                              | STEEL                                          | (47) 07.07.2021                         |
| (54) ROTATING ARC SENSOR                     | (73) ExxonMobil Research and Engineering       | (87) SE2012050127                       |
| (73) Yan, Guoqing                            | Company                                        | 15.08.2013                              |
| (72) YAN, Guoqing                            | Posco                                          | (22) 09.02.2012                         |
| YAN, Zongyi                                  | (72) WASSON, Andrew J.                         | (54) BACKING ARRANGEMENT FOR USE        |
| (31) 201910056147                            | FAIRCHILD, Douglas P.                          | IN FRICTION STIR WELDING                |
| (32) 18.01.2019                              | JIN, Hyunwoo                                   | (73) ESAB AB                            |
| (33) China                                   | YUE, Xin                                       | (72) LARSSON, Rolf                      |
| (51) B23K 9/073                              | HAN, Iiwook                                    | (51) B23K 35/02                         |
| B23K 9/09                                    | LEE, Sangchul                                  | B23K 35/28                              |
| B23K 9/095                                   | LEE, Bongkeun                                  | B32B 15/01                              |
| B23K 9/173                                   | LEE, Jongsub                                   | C21D 7/13                               |
| (11) EP3406386                               | (31) 201662330405 P                            | (11) EP3645273                          |

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|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (21) EP18773329.0<br>(47) 07.07.2021<br>(87) DE2018100716<br>28.03.2019<br>(22) 16.08.2018<br>(54) METHOD FOR PRODUCING<br>COMPONENTS FROM METAL PLATE<br>(73) GEDIA Gebrüder Dingerkus GmbH<br>(72) KINKELBUR, Thomas<br>DOHLE, Michael<br>(31) 102017121975<br>(32) 22.09.2017<br>(33) Germany                                                                                                                                                                                                                                                     | (21) EP18750341.2<br>(47) 07.07.2021<br>(87) EP2018069330<br>24.01.2019<br>(22) 17.07.2018<br>(54) OPTICAL HEAD<br>(73) ConsultEngineerIP AG<br>(72) GUBLER, Ulrich<br>(31) 102017116110<br>(32) 18.07.2017<br>(33) Germany                                                                                                                                                                            | (54) MACHINE TOOL WITH OPTIMISED<br>ORIENTATION OF VIBRATION<br>DAMPERS<br>(73) Siemens Aktiengesellschaft<br>(72) Bretschneider, Jochen<br>Ladra, Uwe<br>Schäfers, Elmar<br>Schür, Torsten                                                                                                                                                                                                                                                                 |
| (51) B23K 35/02<br>B23K 35/36<br>B23K 35/368<br>B23K 35/40<br>(11) EP3071364<br>(21) EP14766585.5<br>(47) 07.07.2021<br>(87) US2014053020<br>28.05.2015<br>(22) 27.08.2014<br>(54) LOW-MANGANESE WELDING WIRE<br>(73) Hobart Brothers Company<br>(72) AMATA, Mario Anthony<br>BUNDY, Joseph C.<br>BARHORST, Steven Edward<br>FIORE, Susan Renata<br>DUNCAN, Daryl L.<br>(31) 201314086758<br>(32) 21.11.2013<br>(33) United States of America                                                                                                        | (51) B23P 6/00<br>F01D 5/00<br>F01D 9/04<br>F01D 11/00<br>F01D 25/24<br>(11) EP3628030<br>(21) EP18723742.5<br>(47) 07.07.2021<br>(87) EP2018060758<br>15.11.2018<br>(22) 26.04.2018<br>(54) METHOD FOR MAINTAINING A<br>TURBOMACHINE<br>(73) Siemens Energy Global GmbH & Co. KG<br>(72) AHMAD, Fathi<br>KUHLEE, Matthias<br>RADULOVIC, Radan<br>(31) 102017207667<br>(32) 08.05.2017<br>(33) Germany | (51) B23Q 3/06<br>B25B 5/06<br>(11) EP3563970<br>(21) EP18780790.4<br>(47) 14.07.2021<br>(87) JP2018009953<br>11.10.2018<br>(22) 14.03.2018<br>(54) ROTARY CLAMP<br>(73) Kosmek Ltd.<br>(72) YONEZAWA, Keitaro<br>(31) 2017075592<br>(32) 05.04.2017<br>(33) Japan                                                                                                                                                                                          |
| (51) B23K 35/02<br>B23P 15/00<br>B23P 15/24<br>B23K 26/082<br>B23K 26/34<br>B23K 26/342<br>B33Y 10/00<br>B33Y 30/00<br>B33Y 50/02<br>B29C 64/147<br>B29C 64/393<br>(11) EP3482933<br>(21) EP18205653.1<br>(47) 07.07.2021<br>(22) 12.11.2018<br>(54) PROCESS MONITORING FOR<br>MOBILE LARGE SCALE ADDITIVE<br>MANUFACTURING USING FOIL-BASED<br>BUILD MATERIALS<br>(73) General Electric Company<br>(72) MAMRAK, Justin<br>REDDING, MacKenzie Ryan<br>SPEARS, Thomas Graham<br>(31) 201715811313<br>(32) 13.11.2017<br>(33) United States of America | (51) B23Q 1/00<br>B23Q 3/157<br>B23Q 11/08<br>(11) EP3511117<br>(21) EP16915719.5<br>(47) 07.07.2021<br>(87) JP2016076667<br>15.03.2018<br>(22) 09.09.2016<br>(54) MACHINE TOOL<br>(73) Makino Milling Machine Co., Ltd.<br>(72) TAKADA, Daisuke<br>TANGE, Keisuke<br>NAKAYASU, Kazumasa                                                                                                               | (51) B23Q 3/157<br>B25F 5/02<br>(11) EP2937188<br>(21) EP15164715.3<br>(47) 07.07.2021<br>(22) 22.04.2015<br>(54) MACHINE TOOL WITH INTEGRATED<br>TOOL CARTRIDGE<br>(73) Grizzly Tools GmbH & Co. KG<br>(72) Chen, Huifu<br>(31) 202014101891 U<br>(32) 22.04.2014<br>(33) Germany                                                                                                                                                                          |
| (51) B23K 103/00<br>B29C 65/00<br>B29C 65/16<br>B23K 26/00<br>B23K 26/064<br>B23K 26/14<br>B23K 26/21<br>B23K 26/324<br>(11) EP3655239                                                                                                                                                                                                                                                                                                                                                                                                               | (51) B23Q 1/03<br>B27M 1/08<br>(11) EP3403795<br>(21) EP18172542.5<br>(47) 07.07.2021<br>(22) 16.05.2018<br>(54) MACHINE TOOL WITH A WORKPIECE<br>HOLDER COMPRISING PARALLEL<br>BEAMS AND MOTORIZED CARRIAGES<br>MOVABLE ALONG SAID BEAMS<br>(73) PAOLINO BACCI S.R.L.<br>(72) BACCI, Giuseppe<br>BACCI, Paolo<br>BACCI, Nino<br>(31) 201700054051<br>(32) 18.05.2017<br>(33) Italy                    | (51) B23Q 3/16<br>B28D 1/00<br>B28D 1/04<br>B28D 7/00<br>B28D 7/04<br>(11) EP3658345<br>(21) EP18753467.2<br>(47) 07.07.2021<br>(87) IB2018055493<br>31.01.2019<br>(22) 24.07.2018<br>(54) ELECTRONICALLY-CONTROLLED<br>APPARATUS FOR CUTTING AND<br>MACHINING NATURAL OR SYNTHETIC<br>STONE PLATES OR GLASS PLATES<br>(73) Biesse S.p.A.<br>(72) BELLI, Marco<br>FRONGIA, Marco<br>GENNARI, Gianluca<br>(31) 201700085377<br>(32) 26.07.2017<br>(33) Italy |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | (51) B23Q 11/00<br>B27M 1/00<br>(11) EP3398713<br>(21) EP18170449.5<br>(47) 14.07.2021<br>(22) 02.05.2018<br>(54) A METHOD AND MACHINE TO<br>PROCESS SECTION BARS, IN<br>PARTICULAR MADE OF ALUMINIUM,<br>LIGHT ALLOYS, PVC OR THE LIKE.<br>(73) F.O.M. Industrie S.r.l.                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

|                                                                                    |                                                                                          |                                                    |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------|
| (72) LATTANZI, Lorenzo                                                             | (54) DIAMOND SURFACE POLISHING METHOD                                                    | (32) 13.04.2018                                    |
| (31) 201700046975                                                                  | (73) Toyo Seikan Group Holdings, Ltd.                                                    | (33) Japan                                         |
| (32) 02.05.2017                                                                    | (72) SHIROISHI, Ryoza                                                                    | (51) B24B 23/00                                    |
| (33) Italy                                                                         | TAKAO, Kenichi                                                                           | B24B 23/04                                         |
| (51) B23Q 11/08                                                                    | (31) 2010292145                                                                          | B25B 21/00                                         |
| (11) EP3663038                                                                     | (32) 28.12.2010                                                                          | B25B 23/18                                         |
| (21) EP19213677.8                                                                  | (33) Japan                                                                               | B25F 5/02                                          |
| (47) 14.07.2021                                                                    | (51) B24B 5/22                                                                           | (11) EP3318366                                     |
| (22) 04.12.2019                                                                    | B24B 53/04                                                                               | (21) EP17196722.7                                  |
| (54) EXTENDIBLE PROTECTIVE DEVICE                                                  | (11) EP3206835                                                                           | (47) 07.07.2021                                    |
| (73) P.E.I. Protezioni Elaborazioni Industriali S.r.l.                             | (21) EP15807590.3                                                                        | (22) 17.10.2017                                    |
| (72) MARDEGAN, Vittorio                                                            | (47) 07.07.2021                                                                          | (54) POWER TOOL                                    |
| (31) 201800010883                                                                  | (87) DE2015000494                                                                        | (73) Nanjing Chervon Industry Co., Ltd.            |
| (32) 07.12.2018                                                                    | 21.04.2016                                                                               | (72) QIU, Dongrong                                 |
| (33) Italy                                                                         | (22) 11.10.2015                                                                          | TU, Chongyang                                      |
| (51) B23Q 17/20                                                                    | (54) CENTERLESS GRINDING MACHINE AND METHOD FOR THE USE OF A CENTERLESS GRINDING MACHINE | CAO, Dong                                          |
| G01B 5/008                                                                         | (73) Modler, Hans-Wilhelm                                                                | CHEN, Liang                                        |
| G01B 21/04                                                                         | (72) Modler, Hans-Wilhelm                                                                | (31) 201610977156                                  |
| G05B 19/401                                                                        | (31) 102014014877                                                                        | 201710669326                                       |
| G05B 19/409                                                                        | (32) 13.10.2014                                                                          | 201720987267 U                                     |
| (11) EP3437795                                                                     | (33) Germany                                                                             | (32) 07.11.2016                                    |
| (21) EP16896944.2                                                                  | (51) B24B 7/06                                                                           | 08.08.2017                                         |
| (47) 07.07.2021                                                                    | B24B 29/00                                                                               | 08.08.2017                                         |
| (87) JP2016060826                                                                  | (11) EP3403763                                                                           | (33) China                                         |
| 05.10.2017                                                                         | (21) EP18169294.8                                                                        | China                                              |
| (22) 31.03.2016                                                                    | (47) 07.07.2021                                                                          | China                                              |
| (54) APPARATUS FOR MEASURING A WORKPIECE AND MACHINE TOOL                          | (22) 25.04.2018                                                                          | (51) B24B 31/06                                    |
| (73) Makino Milling Machine Co., Ltd.                                              | (54) GRINDING MACHINE FOR GRINDING A SURFACE OF AN OBJECT                                | B24B 47/04                                         |
| (72) ISHII, Kazunari                                                               | (73) Karl Heesemann Maschinenfabrik GmbH & Co. KG                                        | B24B 49/16                                         |
| KAWAI, Rie                                                                         | (31) 102017110950                                                                        | B24B 37/10                                         |
| KASAI, Koji                                                                        | (32) 19.05.2017                                                                          | (11) EP3509792                                     |
| STANCU, Alexandra Florentina                                                       | (33) Germany                                                                             | (21) EP17762110.9                                  |
| (51) B23Q 17/24                                                                    | (51) B24B 7/19                                                                           | (47) 14.07.2021                                    |
| B29C 73/10                                                                         | B24B 21/00                                                                               | (87) EP2017072199                                  |
| B32B 38/10                                                                         | B24B 21/10                                                                               | 15.03.2018                                         |
| G01B 11/24                                                                         | B24B 21/18                                                                               | (22) 05.09.2017                                    |
| G01M 5/00                                                                          | (11) EP3326750                                                                           | (54) VIBRATION POLISHING DEVICE                    |
| G01N 21/00                                                                         | (21) EP17197993.3                                                                        | (73) ATM Qness GmbH                                |
| (11) EP3541626                                                                     | (47) 07.07.2021                                                                          | (72) KLEY, Michael                                 |
| (21) EP17811201.7                                                                  | (22) 24.10.2017                                                                          | HÖFER, Matthias                                    |
| (47) 07.07.2021                                                                    | (54) GRINDING MACHINE                                                                    | (31) 102016116676                                  |
| (87) EP2017079177                                                                  | (73) Karl Heesemann Maschinenfabrik GmbH & Co. KG                                        | (32) 06.09.2016                                    |
| 24.05.2018                                                                         | (31) 102016120330                                                                        | (33) Germany                                       |
| (22) 14.11.2017                                                                    | (32) 25.10.2016                                                                          | (51) B24C 1/04                                     |
| (54) METHOD AND SYSTEM FOR INSPECTING PLY-BY-PLY MACHINING OF MULTILAYER MATERIALS | (33) Germany                                                                             | B24C 1/06                                          |
| (73) BAYAB INDUSTRIES                                                              | (51) B24B 19/26                                                                          | B24C 1/08                                          |
| (72) CENAC, François                                                               | B24B 27/00                                                                               | B24C 3/06                                          |
| (31) 1661031                                                                       | B24B 49/12                                                                               | B24C 7/00                                          |
| (32) 15.11.2016                                                                    | G01B 11/24                                                                               | B24C 9/00                                          |
| (33) France                                                                        | G01N 21/84                                                                               | B44C 1/22                                          |
| (51) B24B 1/00                                                                     | (11) EP3593944                                                                           | (11) EP3359338                                     |
| B24B 7/02                                                                          | (21) EP19778415.0                                                                        | (21) EP16729771.2                                  |
| B24B 7/22                                                                          | (47) 14.07.2021                                                                          | (47) 07.07.2021                                    |
| B24B 9/16                                                                          | (87) JP2019003800                                                                        | (87) EP2016000883                                  |
| B24B 19/22                                                                         | 17.10.2019                                                                               | 13.04.2017                                         |
| B24B 21/04                                                                         | (22) 04.02.2019                                                                          | (22) 30.05.2016                                    |
| B24B 21/16                                                                         | (54) AUTOMATIC POLISHING SYSTEM                                                          | (54) METHOD FOR MACHINING A SURFACE OF A COMPONENT |
| B24D 3/06                                                                          | (73) TAIKISHA LTD.                                                                       | (73) Audi AG                                       |
| (11) EP2660004                                                                     | (72) SHIWA, Hideo                                                                        | (72) BRANDL, Erhard                                |
| (21) EP11852528.6                                                                  | NAKAYAMA, Genji                                                                          | LANGER, Maurice                                    |
| (47) 14.07.2021                                                                    | HIGASHI, Yoshio                                                                          | KUNTZE, Thomas                                     |
| (87) JP2011066952                                                                  | (31) 2018077390                                                                          | (31) 102015013167                                  |
| 05.07.2012                                                                         |                                                                                          | (32) 09.10.2015                                    |
| (22) 26.07.2011                                                                    |                                                                                          | (33) Germany                                       |
|                                                                                    |                                                                                          | (51) B24C 1/04                                     |
|                                                                                    |                                                                                          | B24C 1/06                                          |
|                                                                                    |                                                                                          | B24C 7/00                                          |

|                                 |                                                |                                       |
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| B24C 9/00                       | (31) PCT/EP2014/059311                         | United States of America              |
| B24C 11/00                      | (32) 07.05.2014                                | (51) B25J 9/00                        |
| C03C 15/00                      | (33) World Intellectual Property Office (WIPO) | B25J 9/16                             |
| C03C 19/00                      | (51) B25F 5/00                                 | B28B 1/00                             |
| (11) EP3548223                  | (11) EP3463759                                 | B28B 3/20                             |
| (21) EP17812022.6               | (21) EP17723363.2                              | E04B 1/35                             |
| (47) 14.07.2021                 | (47) 07.07.2021                                | E04G 21/04                            |
| (87) FR2017053215               | (87) EP2017061425                              | B33Y 30/00                            |
| 07.06.2018                      | 30.11.2017                                     | (11) EP3638472                        |
| (22) 22.11.2017                 | (22) 12.05.2017                                | (21) EP18752600.9                     |
| (54) PROCESS AND FACILITY FOR   | (54) HAND-HELD POWER TOOL DEVICE               | (47) 14.07.2021                       |
| FROSTING A GLASS CONTAINER      | (73) Robert Bosch GmbH                         | (87) FR2018051865                     |
| (73) SA Gerard Pariche          | (72) KYNAST, Andreas                           | 07.02.2019                            |
| (72) DOUVILLE, Bruno            | WISMER, Michael                                | (22) 20.07.2018                       |
| (31) 1661797                    | (31) 102016209049                              | (54) CABLE-BASED PARALLEL ROBOT       |
| (32) 01.12.2016                 | (32) 24.05.2016                                | AND METHOD FOR CONTROLLING            |
| (33) France                     | (33) Germany                                   | SUCH A ROBOT                          |
| (51) B25B 5/00                  | (51) B25J 5/00                                 | (73) Xtrees                           |
| B25B 7/02                       | G05D 1/08                                      | (72) ROUX, Philippe                   |
| B25B 31/00                      | (11) EP3653345                                 | MALLET, Alban                         |
| F16B 5/01                       | (21) EP19208815.1                              | BOUYSSOU, Charles                     |
| F16B 11/00                      | (47) 14.07.2021                                | AKHAVAN ZAKERI, Mahriz                |
| (11) EP3521642                  | (22) 13.11.2019                                | BLANCHET, Laurent                     |
| (21) EP19154125.9               | (54) TWO WHEEL AUTOMATIC GUIDED                | MOREL, Philippe                       |
| (47) 14.07.2021                 | VEHICLE                                        | (31) 1757402                          |
| (22) 29.01.2019                 | (73) Arrival Limited                           | (32) 02.08.2017                       |
| (54) ASSEMBLY OF A COMPOUND     | (72) Krinkin, Kirill Vladimirovich             | (33) France                           |
| ELEMENT TO A CONNECTOR          | Lesin, Leonid Mikchailovich                    | (51) B25J 9/00                        |
| (73) Elbe Flugzeugwerke GmbH    | Kozlenok, Aleksandr Vladimirovich              | B27B 5/065                            |
| (72) Knorr, Alexander           | Astakhov, Konstantin Alexandrovich             | B27B 31/00                            |
| Hörich, Frank                   | (31) 201818474                                 | (11) EP3081343                        |
| Gärtner, Dr. Egbert             | (32) 13.11.2018                                | (21) EP16165015.5                     |
| (31) 102018102336               | (33) United Kingdom                            | (47) 14.07.2021                       |
| (32) 02.02.2018                 | (51) B25J 5/02                                 | (22) 13.04.2016                       |
| (33) Germany                    | B25J 17/02                                     | (54) PLATE PARTITIONING FACILITY AND  |
| (51) B25B 21/00                 | B67D 7/04                                      | METHOD FOR PARTITIONING PLATE-        |
| B25B 23/14                      | (11) EP2248760                                 | SHAPED WORKPIECES                     |
| B25B 23/145                     | (21) EP10004685.3                              | (73) HOMAG Plattenaufteiltechnik GmbH |
| B25B 23/147                     | (47) 07.07.2021                                | (72) ELHAUS, Uwe                      |
| (11) EP3275596                  | (22) 04.05.2010                                | ZIMBAKOV, Darko                       |
| (21) EP16772593.6               | (54) Method and device for filling components  | MARTYNENKO, Sergey                    |
| (47) 14.07.2021                 | with supplies on automobile industry           | KRESS, Martin                         |
| (87) JP2016059537               | production lines                               | DITTUS, Jens                          |
| 06.10.2016                      | (73) Dürr Somac GmbH                           | KUSSMAUL, Volker                      |
| (22) 25.03.2016                 | (72) Neubert, Dieter                           | KEMPF, Martin                         |
| (54) THREADED MEMBER TIGHTENING | Geilert, Bernd                                 | SCHÜRER, Marko                        |
| TOOL                            | Kämmer, Guido                                  | PFROMMER, Achim                       |
| (73) Nitto Kohki Co., Ltd.      | (31) 102009020312                              | MAIWALD, Wolfgang                     |
| (72) HITA, Hirokazu             | (32) 05.05.2009                                | (31) 102015206824                     |
| OTSUKA, Kenji                   | (33) Germany                                   | (32) 15.04.2015                       |
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| (32) 27.03.2015                 | B25J 9/10                                      | (51) B25J 9/00                        |
| (33) Japan                      | B25J 19/00                                     | B29C 65/16                            |
| (51) B25C 1/00                  | (11) EP3626407                                 | (11) EP3630461                        |
| B25F 5/00                       | (21) EP19204205.9                              | (21) EP18727175.4                     |
| B27B 17/00                      | (47) 07.07.2021                                | (47) 07.07.2021                       |
| (11) EP3140082                  | (22) 06.05.2015                                | (87) EP2018061965                     |
| (21) EP15719485.3               | (54) ENERGY RECOVERING LEGGED                  | 29.11.2018                            |
| (47) 07.07.2021                 | ROBOTIC DEVICE                                 | (22) 09.05.2018                       |
| (87) EP2015059911               | (73) Sarcos LC                                 | (54) QUASI-SIMULTANEOUS LASER         |
| 12.11.2015                      | (72) SMITH, Fraser M.                          | WELDING PROCESS                       |
| (22) 06.05.2015                 | OLIVIER, Marc X.                               | (73) ConsultEngineerIP AG             |
| (54) THROTTLE LOCKOUT WITH      | (31) 201461989427 P                            | (72) GUBLER, Ulrich                   |
| DISSIMILAR ACTION               | 201514704872                                   | (31) 102017111244                     |
| (73) Husqvarna AB               | (32) 06.05.2014                                | (32) 23.05.2017                       |
| (72) MARTINSSON, Pär            | 05.05.2015                                     | (33) Germany                          |
| HEROU, Mia                      | (33) United States of America                  | (51) B25J 9/10                        |
| ARVIDSSON, Mikael               |                                                | B25J 19/00                            |

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| (11) EP2664423                          | G05D 1/02                              | B25J 15/02                                 |
| (21) EP13166759.4                       | (11) EP3292014                         | H05K 13/04                                 |
| (47) 07.07.2021                         | (21) EP16789408.8                      | (11) EP3589460                             |
| (22) 07.05.2013                         | (47) 14.07.2021                        | (21) EP18711690.0                          |
| (54) Robot arm with an adjusting device | (87) IL2016050453                      | (47) 07.07.2021                            |
| (73) KUKA Deutschland GmbH              | 10.11.2016                             | (87) IB2018051192                          |
| (72) Nitz, Gernot                       | (22) 02.05.2016                        | 07.09.2018                                 |
| Liebl, Franz                            | (54) UNIVERSAL AUTONOMOUS ROBOTIC      | (22) 26.02.2018                            |
| (31) 102012208098                       | DRIVING SYSTEM                         | (54) GRIPPING SYSTEM                       |
| (32) 15.05.2012                         | (73) B.G. Negev Technologies and       | (73) Tyco Electronics (Shanghai) Co., Ltd. |
| (33) Germany                            | Applications Ltd.                      | Shenzhen AMI Technology Co. Ltd.           |
| (51) B25J 9/16                          | (72) GUTERMAN, Hugo                    | (72) DAI, Zhiyong                          |
| (11) EP3484674                          | YECHIEL, Oded                          | HU, Lvhai                                  |
| (21) EP17769139.1                       | (31) 201562156911 P                    | LIU, Yun                                   |
| (47) 07.07.2021                         | (32) 05.05.2015                        | ZENG, Qinglong                             |
| (87) US2017047131                       | (33) United States of America          | KANG, Wei                                  |
| 22.02.2018                              | (51) B25J 9/16                         | (31) 201710112539                          |
| (22) 16.08.2017                         | B25J 13/08                             | (32) 28.02.2017                            |
| (54) METHOD AND SYSTEM FOR              | B25J 19/02                             | (33) China                                 |
| PRESERVING PRIVACY FOR CLOUD-           | H04N 5/232                             | (51) B25J 15/00                            |
| BASED MANUFACTURING ANALYSIS            | (11) EP3345729                         | B25J 15/12                                 |
| SERVICES                                | (21) EP15903027.9                      | C09J 7/00                                  |
| (73) Siemens Aktiengesellschaft         | (47) 07.07.2021                        | (11) EP3580023                             |
| The Regents of the University of        | (87) JP2015075044                      | (21) EP18722022.3                          |
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| (72) GOLDBERG, Ken                      | (22) 03.09.2015                        | (87) EP2018061229                          |
| CHANDRA, Ramu                           | (54) ROBOT SYSTEM WITH CAMERA          | 08.11.2018                                 |
| POKORNY, Florian Till                   | (73) FUJI Corporation                  | (22) 02.05.2018                            |
| MAHLER, Jeffrey Brian                   | (72) YAMASHITA, Yasuhiro               | (54) GRIPPING APPARATUS AND METHOD         |
| APARICIO OJEA, Juan L.                  | Oishi, Nobuo                           | OF PRODUCING A GRIPPING                    |
| (31) 201662375952 P                     | SAKAI, Takayoshi                       | APPARATUS                                  |
| (32) 17.08.2016                         | (51) B25J 9/16                         | (73) Max-Planck-Gesellschaft zur Förderung |
| (33) United States of America           | G05B 19/401                            | der Wissenschaften e.V.                    |
| (51) B25J 9/16                          | (11) EP3436876                         | Carnegie Mellon University                 |
| (11) EP3169489                          | (21) EP17717094.1                      | (72) SONG, Sukho                           |
| (21) EP15831185.2                       | (47) 07.07.2021                        | SITTI, Metin                               |
| (47) 07.07.2021                         | (87) EP2017057187                      | DROTLEF, Dirk-Michael                      |
| (87) US2015040281                       | 05.10.2017                             | MAJIDI, Carmel                             |
| 21.04.2016                              | (22) 27.03.2017                        | (31) 201762500778 P                        |
| (22) 14.07.2015                         | (54) METHOD, CONSTRAINING DEVICE       | (32) 03.05.2017                            |
| (54) REAL-TIME DETERMINATION OF         | AND SYSTEM FOR DETERMINING             | (33) United States of America              |
| OBJECT METRICS FOR TRAJECTORY           | GEOMETRIC PROPERTIES OF A              | (51) B25J 15/06                            |
| PLANNING                                | MANIPULATOR                            | B29C 70/38                                 |
| (73) X Development LLC                  | (73) Cognibotics AB                    | (11) EP3406430                             |
| (72) KONOLIGE, Kurt                     | (72) NILSSON, Klas                     | (21) EP18174254.5                          |
| RUBLEE, Ethan                           | NILSSON, Adam                          | (47) 14.07.2021                            |
| KALAKRISHANAN, Mrinal                   | STOLT, Andreas                         | (22) 25.05.2018                            |
| (31) 201414333258                       | SÖRNMO, Olof                           | (54) PICK AND PLACE END EFFECTOR           |
| (32) 16.07.2014                         | HOLMSTRAND, Martin                     | (73) The Boeing Company                    |
| (33) United States of America           | NILSSON, Niklas                        | (72) STONE, Paul R                         |
| (51) B25J 9/16                          | (31) 16162695                          | TAYLOR, William R                          |
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| (47) 14.07.2021                         | (51) B25J 9/16                         | (33) United States of America              |
| (87) IB2016001821                       | G05B 19/408                            | (51) B25J 17/02                            |
| 05.07.2018                              | (11) EP3165978                         | B62M 9/1242                                |
| (22) 27.12.2016                         | (21) EP16194798.1                      | (11) EP3230157                             |
| (54) METHOD AND SYSTEM FOR              | (47) 14.07.2021                        | (21) EP15818123.0                          |
| DETERMINING A SEQUENCE OF               | (22) 20.10.2016                        | (47) 14.07.2021                            |
| KINEMATIC CHAINS OF A MULTIPLE          | (54) PROCEDURE FOR INITIAL START-UP    | (87) US2015065090                          |
| ROBOT                                   | OF A PLANT                             | 16.06.2016                                 |
| (73) Siemens Industry Software Ltd.     | (73) FFT Produktionssysteme GmbH & Co. | (22) 10.12.2015                            |
| (72) HAZAN, Moshe                       | KG                                     | (54) LINEAR DERAILLEUR MECHANISM           |
| (51) B25J 9/16                          | (72) Schönberg, Alexander              | (73) Yeti Design, LLC                      |
| B25J 11/00                              | (31) 202015105595 U                    | (72) ZAWISTOWSKI, Peter                    |
| B60K 26/00                              | (32) 21.10.2015                        | (31) 201462090220 P                        |
| B62D 6/00                               | (33) Germany                           | (32) 10.12.2014                            |
| G01C 21/34                              | (51) B25J 15/00                        | (33) United States of America              |



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| (51) B26D 7/08                          | (47) 14.07.2021                   | B29C 70/50                       |
| B26D 7/27                               | (87) EP2012069086                 | B29C 70/52                       |
| B26F 1/44                               | 04.04.2013                        | B29K 101/12                      |
| F21S 41/20                              | (22) 27.09.2012                   | B29D 99/00                       |
| F21S 43/20                              | (54) PANELS OF MEDIUM DENSITY     | (11) EP3542998                   |
| F21V 9/30                               | FIBREBOARD                        | (21) EP19163363.5                |
| (11) EP3679292                          | (73) Titan Wood Limited           | (47) 07.07.2021                  |
| (21) EP18783055.9                       | (72) POL, Bernardus, Jozef, Maria | (22) 18.03.2019                  |
| (47) 14.07.2021                         | VAN DOMMELE, Stefan               | (54) DEVICE AND METHOD FOR       |
| (87) FR2018052185                       | KAPPEN, Theorodus, Gerardus,      | MANUFACTURING A STRUCTURAL       |
| 14.03.2019                              | Marinus, Maria                    | THERMOPLASTIC PART               |
| (22) 06.09.2018                         | (31) 11183175                     | (73) Stelia Aerospace            |
| (54) METHOD FOR MAKING A COLOUR         | (32) 28.09.2011                   | (72) MAGNIN, Mr Pierre           |
| SCREEN FOR A MOTOR VEHICLE              | (33) European Patent Office (EPO) | (31) 1852432                     |
| LIGHTING AND/OR SIGNALLING              | (51) B27M 3/00                    | (32) 21.03.2018                  |
| DEVICE                                  | (11) EP3300825                    | (33) France                      |
| (73) Marelli Automotive Lighting France | (21) EP16191017.9                 | (51) B27N 3/18                   |
| (72) BUISSON, Alain                     | (47) 07.07.2021                   | B65G 13/06                       |
| LAFFETA, Christophe                     | (22) 28.09.2016                   | B65G 47/252                      |
| (31) 1758307                            | (54) A THREAD FORMING TOOL        | (11) EP3571032                   |
| (32) 08.09.2017                         | (73) WALTER AG                    | (21) EP18702938.4                |
| (33) France                             | (72) Bihrer, Martin               | (47) 14.07.2021                  |
| (51) B26D 7/20                          | (51) B27N 1/02                    | (87) EP2018051270                |
| F16B 1/00                               | B27N 3/16                         | 26.07.2018                       |
| (11) EP3685977                          | B27N 3/18                         | (22) 19.01.2018                  |
| (21) EP19172238.8                       | B27N 3/20                         | (54) TURNING APPARATUS FOR A     |
| (47) 07.07.2021                         | B27N 3/22                         | COOLING TURNER                   |
| (22) 02.05.2019                         | B27N 5/00                         | (73) Dieffenbacher Panelboard Oy |
| (54) PAD SUPPORTING FRAME               | B30B 11/02                        | (72) MÄNNIKKÖ, Ari               |
| (73) Sun Same Enterprises Co., Ltd.     | B30B 15/30                        | (31) 20175042                    |
| (72) SHIH, Wen-Jer                      | B65D 19/00                        | (32) 19.01.2017                  |
| (31) 108201120 U                        | (11) EP3558610                    | (33) Finland                     |
| (32) 24.01.2019                         | (21) EP17818159.0                 | (51) B28B 1/00                   |
| (33) Taiwan, Province of China          | (47) 07.07.2021                   | C04B 35/565                      |
| (51) B26F 3/00                          | (87) EP2017084080                 | C04B 35/571                      |
| (11) EP3566836                          | 28.06.2018                        | C04B 35/624                      |
| (21) EP19172792.4                       | (22) 21.12.2017                   | (11) EP3277645                   |
| (47) 07.07.2021                         | (54) APPARATUS FOR FORMING A      | (21) EP16714354.4                |
| (22) 06.05.2019                         | MONOLITHIC COMPRESSED WOOD        | (47) 07.07.2021                  |
| (54) MACHINE FOR CUTTING SHEETS BY      | PALLET WITH INCREASED LOAD        | (87) EP2016057000                |
| FLUID PROJECTION                        | CAPACITY                          | 06.10.2016                       |
| (73) Goiti, S.Coop                      | (73) IMAL S.r.l                   | (22) 31.03.2016                  |
| (72) Aranda Pérez, Miguel Angel         | (72) BENEDETTI, Paolo             | (54) PROCESS FOR PRODUCING A     |
| (31) 201830447                          | (31) 201600129741                 | SILICON CARBIDE-CONTAINING BODY  |
| (32) 07.05.2018                         | (32) 22.12.2016                   | (73) Universität Paderborn       |
| (33) Spain                              | (33) Italy                        | (72) GREULICH-WEBER, Siegmund    |
| (51) B27B 17/02                         | (51) B27N 3/00                    | (31) 102015105085                |
| (11) EP3439839                          | B27N 3/04                         | (32) 01.04.2015                  |
| (21) EP17716494.4                       | B27N 3/12                         | (33) Germany                     |
| (47) 07.07.2021                         | B27N 3/18                         | (51) B28B 1/26                   |
| (87) EP2017058067                       | D04H 1/732                        | B28B 1/52                        |
| 12.10.2017                              | (11) EP3346036                    | B32B 5/22                        |
| (22) 05.04.2017                         | (21) EP16841111.4                 | B32B 5/24                        |
| (54) LIGHTWEIGHT CHAINSAW GUIDE BAR     | (47) 07.07.2021                   | B32B 5/30                        |
| (73) Husqvarna AB                       | (87) JP2016003934                 | B32B 9/04                        |
| (72) SARIUS, Niklas                     | 09.03.2017                        | B32B 13/04                       |
| LILIEGÅRD, Christian                    | (22) 30.08.2016                   | B32B 13/12                       |
| JOHANSSON, Jörgen                       | (54) SHEET PRODUCTION APPARATUS   | B32B 13/14                       |
| (31) 201662319966 P                     | AND SHEET PRODUCTION METHOD       | B32B 37/06                       |
| (32) 08.04.2016                         | (73) Seiko Epson Corporation      | B32B 38/00                       |
| (33) United States of America           | (72) HIGUCHI, Naotaka             | B32B 38/08                       |
| (51) B27K 3/36                          | NAKAMURA, Masahide                | C04B 28/26                       |
| B27N 1/00                               | (31) 2015174443                   | C04B 33/04                       |
| B27N 3/04                               | (32) 04.09.2015                   | C09K 21/02                       |
| C08L 97/02                              | (33) Japan                        | D21H 13/40                       |
| C08H 8/00                               | (51) B27N 3/08                    | D21J 1/20                        |
| (11) EP2760652                          | B29C 70/24                        | E04B 1/74                        |
| (21) EP12766088.4                       | B29C 70/46                        | E04B 1/94                        |

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| D04H 1/42                           | E21C 35/193                            | (11) EP3280748                       |
| (11) EP3403821                      | E21C 35/197                            | (21) EP16719783.9                    |
| (21) EP18171298.5                   | (11) EP3329096                         | (47) 14.07.2021                      |
| (47) 07.07.2021                     | (21) EP16833646.9                      | (87) EP2016057684                    |
| (22) 08.05.2018                     | (47) 07.07.2021                        | 13.10.2016                           |
| (54) METHOD FOR PRODUCING A         | (87) US2016044861                      | (22) 08.04.2016                      |
| MULTILAYERED MOLDED PIECE           | 09.02.2017                             | (54) PROCESS FOR MIXING OLEFIN       |
| AND MULTILAYERED MOLDED             | (22) 29.07.2016                        | POLYMER WITH REACTANTS               |
| STRUCTURE                           | (54) CUTTING BIT ASSEMBLY              | (73) Borealis AG                     |
| (73) Techno-Physik Engineering GmbH | (73) Joy Global Underground Mining LLC | (72) BRAUN, Hermann                  |
| (31) 102017208378                   | (72) ARNOLD, Randy                     | REGUILLO CARMONA, Rebeca             |
| (32) 18.05.2017                     | FOLKERTS, James, E.                    | KALTENBACHER, Sascha                 |
| (33) Germany                        | FREDERICK, John, R.                    | KLIMKE, Katja                        |
| (51) B28B 11/04                     | HALLBERG, John                         | MUSTER, Udo                          |
| B29C 44/18                          | KRELLNER, James                        | PROKSCH, Hermann                     |
| (11) EP3280576                      | MEADE, David                           | (31) 15163194                        |
| (21) EP16718245.0                   | TIRYAKI, Bulent                        | (32) 10.04.2015                      |
| (47) 07.07.2021                     | BONETTI, Serena                        | (33) European Patent Office (EPO)    |
| (87) EP2016057666                   | BUSH, Peter, Robert                    | (51) B29B 7/48                       |
| 13.10.2016                          | PICKLES, Charles, Simon, James         | C08K 7/22                            |
| (22) 07.04.2016                     | WORT, Christopher, John, Howard        | C09J 7/10                            |
| (54) METHOD FOR PRODUCING           | RIES, Bernd, Heinrich                  | C09J 7/38                            |
| INSULATED BLOCKS FOR BUILDING       | SCHARTING, Markus, Kilian              | (11) EP3581630                       |
| WALLS                               | (31) 201562199495 P                    | (21) EP19182808.6                    |
| (73) Thermimur Distribution SAS     | (32) 31.07.2015                        | (47) 14.07.2021                      |
| (72) GUICHERD, Josselin             | (33) United States of America          | (22) 02.04.2015                      |
| (31) 1553147                        | (51) B29B 7/00                         | (54) REMOVABLE ADHESIVE TAPE         |
| (32) 10.04.2015                     | B29B 7/90                              | (73) tesa SE                         |
| (33) France                         | B32B 27/08                             | (72) BURMEISTER, Axel                |
| (51) B28B 19/00                     | B32B 27/10                             | PETERSEN, Anika                      |
| B32B 5/00                           | B32B 27/18                             | BLAZEJEWSKI, Anna                    |
| B32B 7/12                           | B32B 27/20                             | LOHMANN, Franciska                   |
| B32B 13/00                          | B32B 27/22                             | (51) B29B 7/50                       |
| B32B 19/00                          | B32B 27/36                             | B29C 48/25                           |
| B32B 21/00                          | B32B 29/00                             | B29C 48/36                           |
| B32B 25/00                          | B32B 29/08                             | B29C 48/68                           |
| B32B 27/00                          | C08J 5/18                              | (11) EP3083187                       |
| B32B 27/08                          | C08L 67/02                             | (21) EP14818996.2                    |
| B32B 27/30                          | B29C 48/40                             | (47) 07.07.2021                      |
| C04B 26/04                          | (11) EP3642268                         | (87) EP2014078925                    |
| C04B 28/04                          | (21) EP18717003.0                      | 25.06.2015                           |
| C04B 111/00                         | (47) 14.07.2021                        | (22) 19.12.2014                      |
| C04B 111/27                         | (87) EP2018058735                      | (54) EXTRUDER COMPRISING AN          |
| C09J 1/00                           | 27.12.2018                             | IMPROVED HOMOGENISING MEMBER         |
| C09J 11/04                          | (22) 05.04.2018                        | AND METHOD FOR EXTRUDING A           |
| E04B 1/66                           | (54) BIODEGRADABLE THREE-LAYER FILM    | VISCOUS MATERIAL                     |
| (11) EP3393993                      | (73) BASF SE                           | (73) Compagnie Générale des          |
| (21) EP16825383.9                   | (72) LOOS, Robert                      | Etablissements Michelin              |
| (47) 14.07.2021                     | AUFFERMANN, Joerg                      | (72) VIGNON, Fabien                  |
| (87) EP2016081977                   | EFFEN, Norbert                         | LHOSPITALIER, Jean-François          |
| 29.06.2017                          | SCHLUTT, Nora                          | (31) 1363250                         |
| (22) 20.12.2016                     | SINKEL, Carsten                        | (32) 20.12.2013                      |
| (54) CONTACT LAYER WITH A SOLID     | LOHMANN, Jerome                        | (33) France                          |
| FILLER COMPONENT                    | SKUPIN, Gabriel                        | (51) B29B 11/08                      |
| (73) Sika Technology AG             | KUENKEL, Andreas                       | B29B 17/00                           |
| (72) ACKERMANN, Herbert             | (31) 17176626                          | (11) EP3445553                       |
| HOEFFLIN, Frank                     | (32) 19.06.2017                        | (21) EP16730508.5                    |
| ROHRER, Roman                       | (33) European Patent Office (EPO)      | (47) 14.07.2021                      |
| GUTJAHR, Lisa                       | (51) B29B 7/48                         | (87) IT2016000098                    |
| Z'ROTZ, Roy                         | B29B 7/72                              | 26.10.2017                           |
| SCHOENBRODT, Simon                  | B29B 7/84                              | (22) 20.04.2016                      |
| (31) 15202467                       | B29B 7/88                              | (54) A PREFORM MANUFACTURING         |
| (32) 23.12.2015                     | B29B 9/06                              | DEVICE                               |
| (33) European Patent Office (EPO)   | B29B 9/12                              | (73) Suntory Holdings Limited        |
| (51) B28D 1/18                      | C08F 255/02                            | S.I.P.A. Società Industrializzazione |
| E21C 27/24                          | B29C 48/05                             | Progettazione Automazione - S.P.A.   |
| E21C 35/18                          | B29C 48/285                            |                                      |
| E21C 35/19                          | B29C 48/76                             |                                      |

|                                                                                                                                     |                                                                                                                                                                    |                                                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EREMA Engineering Recycling<br>Maschinen und Anlagen Gesellschaft<br>m.b.H.                                                         | (54) METHOD FOR PRODUCING THREE<br>DIMENSIONAL PREFORMS BY<br>FORMING TENSIONED PREFORMS                                                                           | B29C 43/46<br>B29C 43/52<br>B29C 59/04<br>B29K 27/06<br>B29K 105/04<br>B29K 311/14<br>B29L 7/00<br>B29L 9/00<br>B29L 31/00<br>B32B 37/00<br>B32B 37/06<br>B32B 37/10<br>B32B 37/15<br>B32B 38/06<br>B32B 38/18<br>B32B 41/00<br>D21G 1/02<br>B29C 48/00<br>B29C 48/07 |
| Kyoei Industry Co., Ltd.                                                                                                            | (73) Coriolis Group                                                                                                                                                |                                                                                                                                                                                                                                                                       |
| (72) GRIBAUDO, Enrico                                                                                                               | (72) TREIBER Johannes                                                                                                                                              |                                                                                                                                                                                                                                                                       |
| FEICHTINGER, Klaus                                                                                                                  | VEENSTRA Simon                                                                                                                                                     |                                                                                                                                                                                                                                                                       |
| HACKL, Manfred                                                                                                                      | HAMLYN Alexander                                                                                                                                                   |                                                                                                                                                                                                                                                                       |
| WOESS, Christoph                                                                                                                    | (31) 1670022                                                                                                                                                       |                                                                                                                                                                                                                                                                       |
| FURUSAWA, Eiichi                                                                                                                    | (32) 02.02.2016                                                                                                                                                    |                                                                                                                                                                                                                                                                       |
| TAKADA, Munehiko                                                                                                                    | (33) France                                                                                                                                                        |                                                                                                                                                                                                                                                                       |
| KISHI, Shigenobu                                                                                                                    | (51) B29B 15/12                                                                                                                                                    |                                                                                                                                                                                                                                                                       |
| SAITO, Yoshihiro                                                                                                                    | B29C 70/28                                                                                                                                                         |                                                                                                                                                                                                                                                                       |
| OGASAWARA, Naoya                                                                                                                    | (11) EP3488986                                                                                                                                                     |                                                                                                                                                                                                                                                                       |
| (51) B29B 11/14                                                                                                                     | (21) EP17830534.8                                                                                                                                                  |                                                                                                                                                                                                                                                                       |
| B29C 49/06                                                                                                                          | (47) 07.07.2021                                                                                                                                                    |                                                                                                                                                                                                                                                                       |
| B29C 65/06                                                                                                                          | (87) ES2017070497                                                                                                                                                  |                                                                                                                                                                                                                                                                       |
| B65D 23/02                                                                                                                          | 25.01.2018                                                                                                                                                         |                                                                                                                                                                                                                                                                       |
| B67D 1/04                                                                                                                           | (22) 10.07.2017                                                                                                                                                    |                                                                                                                                                                                                                                                                       |
| B67D 1/08                                                                                                                           | (54) METHOD FOR TREATING FIBRES,<br>INSTALLATION FOR TREATING                                                                                                      | (11) EP3628487                                                                                                                                                                                                                                                        |
| B67D 7/02                                                                                                                           | FIBRES AND THUS OBTAINED TAPE<br>MADE OF TREATED FIBRES                                                                                                            | (21) EP18792103.6                                                                                                                                                                                                                                                     |
| (11) EP2885241                                                                                                                      | (73) Torres Martinez, Manuel                                                                                                                                       | (47) 07.07.2021                                                                                                                                                                                                                                                       |
| (21) EP13747877.2                                                                                                                   | (72) Torres Martinez, Manuel                                                                                                                                       | (87) CN2018090040                                                                                                                                                                                                                                                     |
| (47) 14.07.2021                                                                                                                     | (31) 201630984                                                                                                                                                     | 01.11.2018                                                                                                                                                                                                                                                            |
| (87) NL2013050554                                                                                                                   | (32) 20.07.2016                                                                                                                                                    | (22) 06.06.2018                                                                                                                                                                                                                                                       |
| 30.01.2014                                                                                                                          | (33) Spain                                                                                                                                                         | (54) CALENDER, AND FLOOR<br>PRODUCTION LINE AND<br>PRODUCTION METHOD                                                                                                                                                                                                  |
| (22) 26.07.2013                                                                                                                     | (51) B29B 17/02                                                                                                                                                    | (73) Qingdao Sanyi Plastic Machinery Co.,<br>Ltd                                                                                                                                                                                                                      |
| (54) TAPPING ASSEMBLY AND<br>CONNECTING DEVICE; CONTAINER<br>AND METHOD FOR BEVERAGE<br>DISPENSING                                  | B29K 105/06                                                                                                                                                        | (72) ZHOU, Yuliang                                                                                                                                                                                                                                                    |
| (73) Heineken Supply Chain B.V.                                                                                                     | C08J 11/14                                                                                                                                                         | (31) 201721317296 U                                                                                                                                                                                                                                                   |
| (72) WITTE, Pieter Gerard                                                                                                           | C08L 101/00                                                                                                                                                        | 201710950987                                                                                                                                                                                                                                                          |
| PAAUWE, Arie Maarten                                                                                                                | (11) EP3527613                                                                                                                                                     | 201721317244 U                                                                                                                                                                                                                                                        |
| BAX, Bart Jan                                                                                                                       | (21) EP19156306.3                                                                                                                                                  | 201710951001                                                                                                                                                                                                                                                          |
| (31) 2009234                                                                                                                        | (47) 07.07.2021                                                                                                                                                    | 201721316788 U                                                                                                                                                                                                                                                        |
| (32) 26.07.2012                                                                                                                     | (22) 08.02.2019                                                                                                                                                    | 201710950992                                                                                                                                                                                                                                                          |
| (33) Netherlands                                                                                                                    | (54) METHOD FOR DECOMPOSITION<br>OF A COMPOSITE MATERIAL WITH<br>ORGANIC MATRIX REINFORCED<br>BY FIBRES, AND APPARATUS FOR<br>IMPLEMENTING SAME                    | (32) 13.10.2017<br>13.10.2017<br>13.10.2017<br>13.10.2017<br>13.10.2017<br>13.10.2017                                                                                                                                                                                 |
| (51) B29B 11/16                                                                                                                     | (73) Extractive                                                                                                                                                    | (33) China                                                                                                                                                                                                                                                            |
| B29C 53/04                                                                                                                          | (72) AMARAL DE OLIVEIRA, Vanessa                                                                                                                                   | China                                                                                                                                                                                                                                                                 |
| B29C 53/56                                                                                                                          | GOETTMANN, Frédéric                                                                                                                                                | China                                                                                                                                                                                                                                                                 |
| B29C 53/80                                                                                                                          | (31) 1870165                                                                                                                                                       | China                                                                                                                                                                                                                                                                 |
| B29C 70/32                                                                                                                          | (32) 14.02.2018                                                                                                                                                    | China                                                                                                                                                                                                                                                                 |
| B29L 31/00                                                                                                                          | (33) France                                                                                                                                                        | China                                                                                                                                                                                                                                                                 |
| (11) EP3509826                                                                                                                      | (51) B29C 31/00                                                                                                                                                    | China                                                                                                                                                                                                                                                                 |
| (21) EP17780785.6                                                                                                                   | B29C 45/17                                                                                                                                                         |                                                                                                                                                                                                                                                                       |
| (47) 14.07.2021                                                                                                                     | (11) EP3170639                                                                                                                                                     |                                                                                                                                                                                                                                                                       |
| (87) FR2017052333                                                                                                                   | (21) EP16196912.6                                                                                                                                                  | (51) B29C 33/30                                                                                                                                                                                                                                                       |
| 15.03.2018                                                                                                                          | (47) 07.07.2021                                                                                                                                                    | B29C 44/12                                                                                                                                                                                                                                                            |
| (22) 04.09.2017                                                                                                                     | (22) 02.11.2016                                                                                                                                                    | B29C 44/42                                                                                                                                                                                                                                                            |
| (54) INSTALLATION AND METHOD FOR<br>FORMING A REVOLVING FIBROUS<br>PREFORM EXHIBITING, IN RADIAL<br>SECTION, A PROFILE THAT EVOLVES | (54) METHOD FOR CONTROLLING THE<br>SPEED AND THE POSITIONING OF A<br>TOOL CHANGING TRUCK, AND WORK<br>STATION FOR A MACHINE EQUIPPED<br>WITH INTERCHANGEABLE TOOLS | B29C 44/58<br>B29C 45/17                                                                                                                                                                                                                                              |
| (73) Safran Aircraft Engines                                                                                                        | (73) Konrad, Hellmut                                                                                                                                               | (11) EP3318384                                                                                                                                                                                                                                                        |
| (72) FABRE, Hubert Jean Marie                                                                                                       | Konrad, Ralf                                                                                                                                                       | (21) EP17196067.7                                                                                                                                                                                                                                                     |
| HELLOT, Jérémy                                                                                                                      | (31) 1658307                                                                                                                                                       | (47) 07.07.2021                                                                                                                                                                                                                                                       |
| (31) 1658307                                                                                                                        | (32) 07.09.2016                                                                                                                                                    | (22) 12.10.2017                                                                                                                                                                                                                                                       |
| (32) 07.09.2016                                                                                                                     | (33) France                                                                                                                                                        | (54) TOOL CARRIER AND<br>MANUFACTURING FACILITY WITH<br>SUCH A TOOL CARRIER                                                                                                                                                                                           |
| (33) France                                                                                                                         | (51) B29B 11/16                                                                                                                                                    | (73) Josef Weischer GmbH & Co. KG                                                                                                                                                                                                                                     |
| (51) B29B 11/16                                                                                                                     | B29C 70/38                                                                                                                                                         | (72) Hune, Rupert                                                                                                                                                                                                                                                     |
| B29C 70/38                                                                                                                          | B29C 70/56                                                                                                                                                         | (31) 102016120788                                                                                                                                                                                                                                                     |
| (11) EP3411220                                                                                                                      | (11) EP3411220                                                                                                                                                     | (32) 01.11.2016                                                                                                                                                                                                                                                       |
| (21) EP17703460.0                                                                                                                   | (21) EP17703460.0                                                                                                                                                  | (33) Germany                                                                                                                                                                                                                                                          |
| (47) 14.07.2021                                                                                                                     | (47) 14.07.2021                                                                                                                                                    | (51) B29C 33/44                                                                                                                                                                                                                                                       |
| (87) FR2017000016                                                                                                                   | (87) FR2017000016                                                                                                                                                  | B29C 33/76                                                                                                                                                                                                                                                            |
| 10.08.2017                                                                                                                          | 10.08.2017                                                                                                                                                         |                                                                                                                                                                                                                                                                       |
| (22) 23.01.2017                                                                                                                     | (22) 23.01.2017                                                                                                                                                    |                                                                                                                                                                                                                                                                       |

|                                      |                                       |                                     |
|--------------------------------------|---------------------------------------|-------------------------------------|
| B29C 39/34                           | (33) Japan                            | (51) B29C 39/00                     |
| B29C 41/06                           | (51) B29C 35/08                       | B29C 39/42                          |
| B29C 45/10                           | B29C 37/00                            | F16L 59/02                          |
| B29C 45/33                           | B32B 25/08                            | F16L 59/05                          |
| B29C 45/36                           | B32B 25/16                            | F16L 59/10                          |
| B29C 45/44                           | B32B 27/08                            | F16L 59/12                          |
| B29D 23/00                           | B32B 27/18                            | F16L 59/14                          |
| B29L 31/24                           | B32B 27/26                            | (11) EP2283269                      |
| F02B 29/04                           | B32B 27/30                            | (21) EP09739794.7                   |
| F02F 1/42                            | B32B 27/36                            | (47) 07.07.2021                     |
| F02M 35/10                           | B32B 27/40                            | (87) US2009042294                   |
| F02M 35/104                          | C08G 18/67                            | 05.11.2009                          |
| (11) EP3330523                       | C08G 18/81                            | (22) 30.04.2009                     |
| (21) EP15899676.9                    | C09D 175/16                           | (54) MANUFACTURING AND INSTALLATION |
| (47) 14.07.2021                      | C08J 7/04                             | OF INSULATED PIPES OR ELEMENTS      |
| (87) JP2015071685                    | (11) EP3308956                        | THEREOF                             |
| 02.02.2017                           | (21) EP16194022.6                     | (73) Cabot Corporation              |
| (22) 30.07.2015                      | (47) 07.07.2021                       | (72) KORAVOS, Jason, J.             |
| (54) DIE ASSEMBLY FOR MOLDING        | (22) 14.10.2016                       | DU PLESSIS, Andries, J.             |
| INSERT FOR AIR INTAKE PORT           | (54) THERMALLY MOLDABLE PANEL         | GREENFIELD, Matthew, B.             |
| (73) Nissan Motor Co., Ltd.          | (73) Senoplast Klepsch & Co. GmbH     | JOHNSON, Aaron, H.                  |
| (72) ARIMA, Kazuki                   | (72) OBERKOFER, Manfred               | MILLER, Thomas, Michael             |
| TANIGUCHI, Takuya                    | (51) B29C 35/08                       | (31) 49483                          |
| (51) B29C 33/52                      | B41M 1/00                             | 152122                              |
| B29C 43/10                           | B41M 1/06                             | (32) 01.05.2008                     |
| B29C 43/32                           | B41M 3/00                             | 12.02.2009                          |
| B29C 43/34                           | B41M 7/00                             | (33) United States of America       |
| B29C 43/36                           | (11) EP3397445                        | United States of America            |
| B29C 70/44                           | (21) EP16820484.0                     | (51) B29C 39/10                     |
| B29C 70/46                           | (47) 14.07.2021                       | B29C 44/00                          |
| B29K 101/10                          | (87) US2016066278                     | B29C 44/14                          |
| B29K 105/06                          | 06.07.2017                            | B29K 105/04                         |
| B29K 105/08                          | (22) 13.12.2016                       | B29K 105/06                         |
| B29L 22/00                           | (54) CONTINUOUS ADDITIVE              | B32B 3/26                           |
| (11) EP3533580                       | MANUFACTURING APPARATUS               | B32B 3/30                           |
| (21) EP17865293.9                    | (73) 3M Innovative Properties Company | B32B 5/02                           |
| (47) 07.07.2021                      | (72) FRANKE, Carsten                  | B32B 5/14                           |
| (87) JP2017039303                    | SMITH, Kenneth L.                     | B32B 5/20                           |
| 03.05.2018                           | BEHNKE, Jesse R.                      | B32B 5/24                           |
| (22) 31.10.2017                      | SMITHSON, Robert L. W.                | B32B 5/32                           |
| (54) METHOD FOR MANUFACTURING        | CRESTIK, Lucas D.                     | B60R 13/08                          |
| FIBER REINFORCED PLASTIC             | BENSON, Olester, Jr.                  | G10K 11/162                         |
| MOLDED BODY                          | HUFFMAN, Alexander J.                 | (11) EP3603951                      |
| (73) Mitsubishi Chemical Corporation | (31) 201562272443 P                   | (21) EP18778066.3                   |
| (72) TAKANO, Tsuneo                  | (32) 29.12.2015                       | (47) 07.07.2021                     |
| HONMA, Takashi                       | (33) United States of America         | (87) JP2018005546                   |
| KAJI, Satoshi                        | (51) B29C 37/00                       | 04.10.2018                          |
| (31) 2016213228                      | B29C 45/00                            | (22) 16.02.2018                     |
| (32) 31.10.2016                      | B29C 45/37                            | (54) FUNCTIONAL LAMINATE AND        |
| (33) Japan                           | B29K 69/00                            | PRODUCTION METHOD THEREFOR          |
| (51) B29C 35/02                      | B29K 95/00                            | (73) Mazda Motor Corporation        |
| B29C 35/08                           | (11) EP3509813                        | (72) KATSURA, Daiji                 |
| F16C 13/00                           | (21) EP17768206.9                     | (31) 2017072516                     |
| G03G 15/00                           | (47) 14.07.2021                       | (32) 31.03.2017                     |
| G03G 15/02                           | (87) GB2017052626                     | (33) Japan                          |
| (11) EP3413137                       | 15.03.2018                            | (51) B29C 43/18                     |
| (21) EP17747479.8                    | (22) 08.09.2017                       | B29C 45/14                          |
| (47) 14.07.2021                      | (54) EQUIPMENT COVER WITH             | B32B 3/26                           |
| (87) JP2017003668                    | TEXTURED OUTER SURFACE AND            | B32B 33/00                          |
| 10.08.2017                           | MANUFACTURING METHOD                  | B44C 5/04                           |
| (22) 01.02.2017                      | (73) Centrica Hive Limited            | B44F 1/06                           |
| (54) CONDUCTIVE ROLLER, AND          | (72) SHADE, Philip                    | B60R 13/02                          |
| PRODUCTION METHOD THEREFOR           | GUY, Tom                              | (11) EP3647055                      |
| (73) Bridgestone Corporation         | KYTE, Jessica                         | (21) EP18207685.1                   |
| (72) SANO Takehiro                   | NAGAMOOTOO, Elvin                     | (47) 14.07.2021                     |
| ATAMI Kiyohiko                       | (31) 201615393                        | (22) 22.11.2018                     |
| (31) 2016017284                      | (32) 09.09.2016                       | (54) METHOD OF MANUFACTURING        |
| (32) 01.02.2016                      | (33) United Kingdom                   | INTERIOR MATERIAL HAVING            |

|                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| COMPOSITE LAYER STRUCTURE<br>CAPABLE OF LIGHT EMISSION<br>THROUGH VARIOUS LOGO PATTERNS                                                                                                                                           | (72) Brizon, Fabricio<br>Nou, Lallo Kametada<br>(31) 201314135524<br>(32) 19.12.2013<br>(33) United States of America                                                                                                           | (11) EP3572205<br>(21) EP18305634.0<br>(47) 07.07.2021<br>(22) 24.05.2018<br>(54) PROCESS FOR MANUFACTURING<br>COMPOSITE ARTICLES                                                                                                                                            |
| (73) Intops. Co., Ltd.<br>Kim, Keun Ha                                                                                                                                                                                            | (51) B29C 44/34<br>C08F 2/44<br>C08J 9/00<br>C08J 9/14<br>C08K 3/22<br>C08L 25/04                                                                                                                                               | (73) Rhodia Operations<br>Georges Pernoud SAS<br>Billion SAS                                                                                                                                                                                                                 |
| (72) KIM, Keun ha<br>CHOI, Won jae<br>LEE, Hong il                                                                                                                                                                                | (11) EP3560989<br>(21) EP17883936.1<br>(47) 14.07.2021<br>(87) KR2017013955<br>28.06.2018<br>(22) 30.11.2017<br>(54) FOAMING RESIN COMPOSITION,<br>PREPARATION METHOD THEREFOR,<br>AND FOAM USING SAME                          | (72) ORANGE, Gilles<br>PASCAL, Fabien<br>JACQUET, Patrice<br>GIROUD, Alexandre                                                                                                                                                                                               |
| (31) 20180132950<br>(32) 01.11.2018<br>(33) Korea (Republic)                                                                                                                                                                      | (31) 20160177858<br>20170159551<br>(32) 23.12.2016<br>27.11.2017<br>(33) Korea (Republic)<br>Korea (Republic)                                                                                                                   | (51) B29C 45/00<br>C08G 64/06<br>C08K 5/00<br>(11) EP3515964<br>(21) EP17771412.8<br>(47) 07.07.2021<br>(87) EP2017073506<br>29.03.2018<br>(22) 18.09.2017<br>(54) TRANSPARENT MOULDED PARTS<br>WITH LOW THICKNESS                                                           |
| (51) B29C 43/18<br>B29C 45/14<br>B32B 33/00<br>B44C 5/04<br>B60R 13/02<br>B60Q 3/54                                                                                                                                               | (73) Lotte Advanced Materials Co., Ltd.<br>(72) KIM, Ju Sung<br>KIM, You Hyun<br>KIM, Yoen Kyoung<br>PARK, Kang Yeol<br>BAE, Seung Yong<br>JEONG, Bong Jae                                                                      | (73) Covestro Intellectual Property GmbH &<br>Co. KG<br>(72) DÖBLER, Martin<br>WEHRMANN, Rolf<br>BOUMANS, Anke<br>WINKLER, Lucia<br>BURGER, Martin                                                                                                                           |
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| (73) Intops. Co., Ltd.<br>Kim, Keun Ha                                                                                                                                                                                            | (51) B29C 44/42<br>B29C 44/56<br>B32B 5/18<br>B32B 5/24<br>C08J 9/36<br>C08L 75/00<br>B32B 7/08                                                                                                                                 | (51) B29C 45/14<br>B32B 15/04<br>B32B 15/088<br>B32B 27/34<br>(11) EP3389976<br>(21) EP16822415.2<br>(47) 14.07.2021<br>(87) EP2016081189<br>22.06.2017<br>(22) 15.12.2016<br>(54) PROCESS FOR PLASTIC<br>OVERMOLDING ON A METAL<br>SURFACE AND PLASTIC-METAL<br>HYBRID PART |
| (72) KIM, Keun ha<br>CHOI, Won jae<br>LEE, Hong il                                                                                                                                                                                | (11) EP3717225<br>(21) EP18833265.4<br>(47) 07.07.2021<br>(87) FR2018053072<br>06.06.2019<br>(22) 30.11.2018<br>(54) METHOD FOR PRODUCING WEBS<br>FOR REINFORCEMENT PLY OF<br>A TYRE BY BUTT-JOINING OF<br>STRAIGHT-WIRE STRIPS | (73) DSM IP Assets B.V.<br>(72) VAN DER BURGT, Frank Peter<br>Theodorius Johannes<br>LIAO, Ruogu<br>YU, Bin<br>PAN, Wei                                                                                                                                                      |
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| (73) Embraer S.A.                                                                                                                                                                                                                 |                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                              |

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| (47) 14.07.2021                          | (51) B29C 49/04                      | MORISHITA Takao                           |
| (87) JP2014053221                        | B29C 49/18                           | INAMURA Tatsuya                           |
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| (22) 12.02.2014                          | B29C 49/26                           | SUGIMURA Satoshi                          |
| (54) BEARING MEMBER, END SECTION         | B29C 49/42                           | (31) 2016109115                           |
| MEMBER, PHOTORECEPTOR                    | B29C 49/46                           | (32) 31.05.2016                           |
| DRUM UNIT, AND METHOD FOR                | B29C 49/78                           | (33) Japan                                |
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| (72) IKEDA, Shuichi                      | (47) 07.07.2021                      | D04C 1/06                                 |
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| F16C 33/46                               | DESIGNED AS A HOLLOW BODY            | (22) 26.07.2018                           |
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| (21) EP18821987.7                        | (72) WESTPHAL Fredrich               | MELT ADHESIVE YARN AND METHOD             |
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| (87) DE2018100882                        | (32) 17.08.2017                      | (73) Federal-Mogul Powertrain LLC         |
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| FRICTION BEARING CAGE, AND USE           | B29L 31/00                           | 25.07.2018                                |
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| (72) DRESSEL, Robert                     | (47) 07.07.2021                      | (51) B29C 64/255                          |
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| (31) 102017125700                        | PREFORM, COMPRISING AN               | (47) 14.07.2021                           |
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| (33) Germany                             | REMOVING A SPINDLE NOSE              | (54) BUILD MATERIAL CONTAINER             |
| (51) B29C 45/27                          | (73) Sidel Participations            | (73) Hewlett-Packard Development Company, |
| B29C 45/28                               | (72) FEVRE, Sébastien                | L.P.                                      |
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| (54) CONDITIONED JACK FOR INJECTION      | (11) EP2940526                       | B29L 31/30                                |
| MOLDING APPARATUS OF PLASTIC             | (21) EP15173112.2                    | B64C 1/06                                 |
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| (22) 15.01.2015                          | (11) EP3466660                       | ISHIDA, Takashi                           |
| (54) METHOD AND DEVICE FOR               | (21) EP17806265.9                    | (31) 2013207663                           |
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| F16H 57/08                             | B32B 27/16                       | (54) A COMPOSITE STRUCTURE AND A        |
| F16H 57/02                             | B32B 27/28                       | METHOD OF FABRICATING THE SAME          |
| F16H 57/023                            | B32B 27/34                       | (73) Rolls-Royce plc                    |
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| (54) TRANSMISSION HOUSING, IN          | (22) 24.04.2017                  | B29C 70/48                              |
| PARTICULAR FOR AN EPICYCLIC            | (54) POLYIMIDE FILM LAYERED BODY | B29C 70/54                              |
| GEAR AND METHOD OF                     | (73) Toyobo Co., Ltd.            | B29C 70/86                              |
| MANUFACTURING                          | (72) HARA, Shota                 | (11) EP3103627                          |
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| (22) 11.08.2016                        | (54) SYSTEM AND METHODS FOR      | PROFILE FOR A SPAR CAP FOR A            |
| (54) FILM EDGE SEALING PROCESS         | BONDING A STRUCTURAL             | WIND TURBINE BLADE, PROFILE,            |
| (73) Extreme Packaging Machinery, Inc. | COMPONENT WITHIN A CHANNEL OF    | SPAR CAP AND WIND TURBINE               |
| (72) UTTARO, Raymond                   | A RAIL                           | BLADE                                   |
| (31) 201514827145                      | (73) The Boeing Company          | (73) Siemens Gamesa Renewable Energy A/ |
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| (51) B29C 65/44                        | WHITE, Christopher A.            | (51) B29C 70/30                         |
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| B65D 25/14                             | F16B 37/12                       | (54) METHOD AND SYSTEM FOR              |
| (11) EP3427944                         | (11) EP3245413                   | GENERATING A LAYUP PLAN FOR             |
| (21) EP17763445.8                      | (21) EP15808334.5                | FORMING A COMPOSITE LAMINATE            |
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| FILM LAMINATE METAL PLATE HAVING       | INTRODUCING A TORQUE INTO A      | Johnson, Brice A.                       |
| EXCELLENT RETORT ADHESIVENESS          | PLASTIC HOUSING                  | Meyer, Robert G.                        |
| (73) Nippon Steel Corporation          | (73) Continental Automotive GmbH | Ibbotson, Stewart James                 |
| (72) KADOWAKI, Nobuo                   | (72) SPLITT, Michael             | (31) 201816013506                       |
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| MIZUTANI, Tomohiro                     | B29C 70/02                       | (11) EP3385066                          |
| KATO, Satoshi                          | B29C 70/08                       | (21) EP18165442.7                       |
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| JONES, Darrell D                                                                                                                                   | (73) Evonik Operations GmbH                                                | (73) Verily Life Sciences LLC                                                          |
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| (73) LM WP Patent Holding A/S                                                                                                                      | (54) AIR COMPRESSOR                                                        | United States of America                                                               |
| (72) NANDIPATI, Srikanth                                                                                                                           | (73) Chou, Wen-San                                                         | United States of America                                                               |
| BASHA, Mohammad, Imdad                                                                                                                             | (72) Chou, Wen-San                                                         | United States of America                                                               |
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| (87) EP2017051326                                                                                                                                  | (22) 22.03.2018                                                            | 08.06.2017                                                                             |
| 17.08.2017                                                                                                                                         | (54) CLOSURE CAP FOR PACKAGING A COSMETIC PRODUCT                          | (22) 31.08.2016                                                                        |
| (22) 23.01.2017                                                                                                                                    | (73) L'OREAL                                                               | (54) METHOD FOR MANUFACTURING OPTICAL FIBER TAPE                                       |
| (54) METHOD FOR PRODUCING A STRUCTURAL ELEMENT CONSISTING OF A FIBRE-COMPOSITE HOLLOW PROFILE AND LOAD-INTRODUCING ELEMENT, AND STRUCTURAL ELEMENT | (72) CHARNAY, Patrick                                                      | (73) Fujikura Ltd.                                                                     |
| (73) Leichtbau-Zentrum Sachsen GmbH                                                                                                                | BOUDOT, Thomas                                                             | (72) MURATA, Akira                                                                     |
| (72) LENZ, Florian                                                                                                                                 | MARCQ, Stéphanie                                                           | ISAJI, Mizuki                                                                          |
| WITSCHHEL, Bernhard                                                                                                                                | GERARD, Laurence                                                           | OSATO, Ken                                                                             |
| LEPPER, Martin                                                                                                                                     | (31) 1752514                                                               | OKADA, Naoki                                                                           |
| (31) 102016202012                                                                                                                                  | (32) 27.03.2017                                                            | (31) 2015237214                                                                        |
| (32) 10.02.2016                                                                                                                                    | (33) France                                                                | (32) 04.12.2015                                                                        |
| (33) Germany                                                                                                                                       | (51) B29D 7/01                                                             | (33) Japan                                                                             |
| (51) B29C 70/52                                                                                                                                    | B32B 27/32                                                                 | (51) B29D 11/00                                                                        |
| B29C 70/88                                                                                                                                         | B32B 37/14                                                                 | G02B 3/00                                                                              |
| (11) EP3569392                                                                                                                                     | (11) EP3261827                                                             | G02B 13/00                                                                             |
| (21) EP18172948.4                                                                                                                                  | (21) EP16707055.6                                                          | H01L 27/146                                                                            |
| (47) 07.07.2021                                                                                                                                    | (47) 14.07.2021                                                            | G02B 7/02                                                                              |
| (22) 17.05.2018                                                                                                                                    | (87) EP2016053853                                                          | G02B 7/04                                                                              |
|                                                                                                                                                    | 01.09.2016                                                                 | (11) EP2606391                                                                         |
|                                                                                                                                                    | (22) 24.02.2016                                                            | (21) EP11746150.9                                                                      |
|                                                                                                                                                    | (54) PROCESS FOR THE FORMATION OF A POROUS FILM ASSEMBLY AND FILM          | (47) 07.07.2021                                                                        |
|                                                                                                                                                    | (73) W.L. Gore & Associates GmbH                                           | (87) CH2011000180                                                                      |
|                                                                                                                                                    | (72) ZAGGL, Alexander                                                      | 23.02.2012                                                                             |
|                                                                                                                                                    | RITTMANN, Michael                                                          | (22) 12.08.2011                                                                        |
|                                                                                                                                                    |                                                                            | (54) METHOD OF MANUFACTURING A PLURALITY OF OPTICAL DEVICES FOR CAMERAS                |
|                                                                                                                                                    |                                                                            | (73) Heptagon Micro Optics Pte. Ltd.                                                   |



|                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (72) RUDMANN, Hartmut<br>ROENTGEN, Peter<br>MALUCK, Matthias<br>ROSSI, Markus                                                                                                                                                                                     | B60C 23/04<br>(11) EP3168068<br>(21) EP16198500.7<br>(47) 07.07.2021<br>(22) 11.11.2016<br>(54) A TIRE SENSOR INSTALLING                                                                                                                                                                                                    | (87) IB2018055501<br>31.01.2019<br>(22) 24.07.2018<br>(54) APPARATUS FOR BUILDING A TYRE<br>FOR VEHICLE WHEELS                                                                                                               |
| (31) 374322 P<br>(32) 17.08.2010<br>(33) United States of America                                                                                                                                                                                                 | (22) 11.11.2016<br>(54) A TIRE SENSOR INSTALLING                                                                                                                                                                                                                                                                            | (73) Pirelli Tyre S.p.A.                                                                                                                                                                                                     |
| (51) B29D 11/00<br>G02B 3/00<br>G02C 7/02<br>B29C 67/00                                                                                                                                                                                                           | STRUCTURE COMPRISING A SENSOR<br>PATCH AND A MANUFACTURING<br>METHOD THEREOF                                                                                                                                                                                                                                                | (72) SANGIOVANNI, Stefano<br>VANIGLIA, Erika<br>MARCHINI, Maurizio                                                                                                                                                           |
| (11) EP3027397<br>(21) EP13814426.6<br>(47) 14.07.2021<br>(87) EP2013002326<br>05.02.2015<br>(22) 31.07.2013<br>(54) ADDITIVE MANUFACTURING FOR<br>TRANSPARENT OPHTHALMIC LENS                                                                                    | (73) Hankook Tire Co., Ltd.<br>(72) SO, Soon Hong<br>KIM, Jeong Heon<br>(31) 20150159878<br>(32) 13.11.2015<br>(33) Korea (Republic)                                                                                                                                                                                        | (31) 201700084375<br>(32) 25.07.2017<br>(33) Italy                                                                                                                                                                           |
| (73) Essilor International<br>(72) VALERI, Robert A.<br>WEBER, Steven<br>BITEAU, John                                                                                                                                                                             | (51) B29D 30/00<br>B65H 54/28<br>(11) EP3237188<br>(21) EP15837093.2<br>(47) 07.07.2021<br>(87) IB2015058962<br>30.06.2016<br>(22) 19.11.2015<br>(54) PLANT FOR COLLECTING OR<br>DISPENSING AN ELONGATED<br>ELEMENT FOR BUILDING TYRES<br>AND METHOD FOR COLLECTING<br>OR DISPENSING AN ELONGATED<br>ELEMENT WOUND IN REELS | (72) NL2019050164<br>26.09.2019<br>(22) 15.03.2019<br>(54) PRESSURE ROLL AND METHOD FOR<br>PRESSING A TIRE LAYER ON A TIRE<br>BUILDING DRUM                                                                                  |
| (51) B29D 30/00<br>B29D 30/06<br>B29D 30/32<br>G06T 7/521<br>(11) EP3558653<br>(21) EP17830005.9<br>(47) 14.07.2021<br>(87) IB2017057419<br>28.06.2018<br>(22) 27.11.2017<br>(54) METHOD FOR CHECKING THE<br>FORMATION OF BEADS OF TYRES<br>AND RELATED STATION   | (73) VMI Holland B.V.<br>(72) KAAGMAN, Mattheus Jacobus<br>BROEK, Hemmeterius Bernardus<br>(31) 2020644<br>(32) 22.03.2018<br>(33) Netherlands                                                                                                                                                                              | (73) VMI Holland B.V.<br>(72) KAAGMAN, Mattheus Jacobus<br>BROEK, Hemmeterius Bernardus<br>(31) 2020644<br>(32) 22.03.2018<br>(33) Netherlands                                                                               |
| (11) EP3558653<br>(21) EP17830005.9<br>(47) 14.07.2021<br>(87) IB2017057419<br>28.06.2018<br>(22) 27.11.2017<br>(54) METHOD FOR CHECKING THE<br>FORMATION OF BEADS OF TYRES<br>AND RELATED STATION                                                                | (73) Pirelli Tyre S.p.A.<br>(72) BIGOGNO, Mauro<br>(31) PD20140362<br>(32) 24.12.2014<br>(33) Italy                                                                                                                                                                                                                         | (51) B29D 30/30<br>B60C 9/07<br>B60C 9/09<br>B60C 15/00<br>(11) EP3243644<br>(21) EP16397515.4<br>(47) 07.07.2021<br>(22) 12.05.2016<br>(54) A TYRE AND A METHOD FOR<br>MANUFACTURING AN ANNULAR<br>CARCASS FOR A TYRE       |
| (73) Pirelli Tyre S.p.A.<br>(72) VANIGLIA, Erika<br>REGOLI, Fabio<br>BORACCO, Stefano<br>CONTI, Davide<br>(31) 201600129048<br>(32) 20.12.2016<br>(33) Italy                                                                                                      | (51) B29D 30/06<br>(11) EP3137289<br>(21) EP15718499.5<br>(47) 14.07.2021<br>(87) EP2015059121<br>05.11.2015<br>(22) 28.04.2015<br>(54) TIRE MOULD MOULDING ELEMENT<br>COMPRISING MARKING FEATURES                                                                                                                          | (73) Nokian Renkaat Oyj<br>(72) YLITALO, Reijo                                                                                                                                                                               |
| (51) B29D 30/00<br>B29D 30/08<br>B29D 30/24<br>B29D 30/26<br>B29D 30/32<br>B29D 30/36<br>(11) EP3458254<br>(21) EP17729184.6<br>(47) 07.07.2021<br>(87) FR2017051251<br>23.11.2017<br>(22) 22.05.2017<br>(54) FOLDING-UP SYSTEM FOR<br>MANUFACTURING GREEN TIRES. | (73) Compagnie Générale des<br>Etablissements Michelin<br>(72) MUHLHOFF, Olivier<br>DESVIGNES, Jean-Claude<br>(31) 1453986<br>(32) 30.04.2014<br>(33) France                                                                                                                                                                | (51) B29D 30/30<br>B65G 21/12<br>(11) EP3206864<br>(21) EP15753308.4<br>(47) 07.07.2021<br>(87) DE2015000337<br>21.04.2016<br>(22) 01.07.2015<br>(54) DEVICE AND METHOD FOR<br>PRODUCING GREEN TYRES                         |
| (73) Compagnie Générale des<br>Etablissements Michelin<br>(72) MASSOPTIER-DAVID, Michaël<br>DEBOEUF, Michel<br>RONDREUX, Pascal<br>HINC, Henri<br>(31) 1654512<br>(32) 20.05.2016<br>(33) France                                                                  | (51) B29D 30/24<br>(11) EP3666512<br>(21) EP19215830.1<br>(47) 14.07.2021<br>(22) 12.12.2019<br>(54) BUILDING CAN FOR BUILDING A TYRE<br>CARCASS                                                                                                                                                                            | (73) Harburg-Freudenberger Maschinenbau<br>GmbH<br>(72) BEHRENS, Achim<br>KLINGER, Dieter<br>(31) 102014015490<br>(32) 14.10.2014<br>(33) Germany                                                                            |
| (51) B29D 30/00<br>G02B 3/00<br>G02C 7/02<br>B29C 67/00                                                                                                                                                                                                           | (73) Marangoni Meccanica S.P.A.<br>(72) LENTI, Massimo<br>WEBER, Michele<br>(31) 201800011017<br>(32) 12.12.2018<br>(33) Italy                                                                                                                                                                                              | (51) B29D 99/00<br>(11) EP3423267<br>(21) EP17707934.0<br>(47) 14.07.2021<br>(87) EP2017055228<br>08.09.2017<br>(22) 06.03.2017<br>(54) METHOD AND DEVICE FOR<br>MANUFACTURING A HOLLOW PART<br>MADE OF A COMPOSITE MATERIAL |
| (11) EP3458254<br>(21) EP17729184.6<br>(47) 07.07.2021<br>(87) FR2017051251<br>23.11.2017<br>(22) 22.05.2017<br>(54) FOLDING-UP SYSTEM FOR<br>MANUFACTURING GREEN TIRES.                                                                                          | (51) B29D 30/26<br>B29D 30/36<br>(11) EP3658365<br>(21) EP18759395.9<br>(47) 07.07.2021                                                                                                                                                                                                                                     |                                                                                                                                                                                                                              |

|                                                                         |                                                                                                                                    |                                                                                              |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| AND TURBINE BLADE PRODUCED BY THIS METHOD                               | AND METHOD OF WINDING SCRAP MATRIX                                                                                                 | (22) 31.07.2018                                                                              |
| (73) Institut De Recherche Et De Technologie Jules Vern                 | (73) Miyakoshi Printing Machinery Co., Ltd.                                                                                        | (54) METHOD OF INSTALLING A HEAT TUBE ON PRE-INSULATED PIPING                                |
| (72) MARCHAND, Christophe                                               | (72) TOMAKI, Hitoshi                                                                                                               | (73) Thermacor Process, Inc.                                                                 |
| (31) 1670083                                                            | TAKAHASHI, Shun                                                                                                                    | (72) Keyes, Thomas Joseph                                                                    |
| (32) 04.03.2016                                                         | FUJIWARA, Reishi                                                                                                                   | (31) 201816017377                                                                            |
| (33) France                                                             | (31) 2017154396                                                                                                                    | (32) 25.06.2018                                                                              |
| (51) B29L 31/18                                                         | (32) 09.08.2017                                                                                                                    | (33) United States of America                                                                |
| F28D 7/00                                                               | (33) Japan                                                                                                                         |                                                                                              |
| F28F 7/02                                                               | (51) B31F 1/28                                                                                                                     | (51) B32B 3/04                                                                               |
| F28F 9/02                                                               | B41J 13/00                                                                                                                         | B32B 3/08                                                                                    |
| B33Y 80/00                                                              | B65B 59/00                                                                                                                         | B32B 5/18                                                                                    |
| (11) EP3559583                                                          | B65B 61/02                                                                                                                         | B32B 25/08                                                                                   |
| (21) EP17803968.1                                                       | (11) EP3354580                                                                                                                     | B32B 27/06                                                                                   |
| (47) 14.07.2021                                                         | (21) EP17154070.1                                                                                                                  | B32B 27/08                                                                                   |
| (87) EP2017080615                                                       | (47) 07.07.2021                                                                                                                    | B32B 27/18                                                                                   |
| 28.06.2018                                                              | (22) 31.01.2017                                                                                                                    | B32B 27/20                                                                                   |
| (22) 28.11.2017                                                         | (54) APPARATUS AND METHOD FOR CREATING ON DEMAND CUSTOMIZED CORRUGATED CARDBOARD FOR FORMING INDIVIDUALLY DESIGNED PACKAGING BOXES | B32B 27/28                                                                                   |
| (54) HEADER FOR A HEAT EXCHANGER AND A HEAT EXCHANGER                   |                                                                                                                                    | B32B 27/30                                                                                   |
| (73) Alfa Laval Corporate AB                                            |                                                                                                                                    | B32B 27/34                                                                                   |
| (72) STRÖMER, Fredrik                                                   | (73) Quadiant Technologies France                                                                                                  | B32B 27/36                                                                                   |
| WALTER, Kristian                                                        | (72) DE BOER, Fokke                                                                                                                | B32B 27/38                                                                                   |
| (31) 16205249                                                           | POLET, Marco                                                                                                                       | B32B 27/40                                                                                   |
| (32) 20.12.2016                                                         | (51) B32B 1/00                                                                                                                     | B32B 27/42                                                                                   |
| (33) European Patent Office (EPO)                                       | B32B 5/02                                                                                                                          | F25D 23/02                                                                                   |
| (51) B30B 11/00                                                         | B32B 5/08                                                                                                                          | (11) EP3183518                                                                               |
| B30B 11/08                                                              | B32B 5/26                                                                                                                          | (21) EP15753444.7                                                                            |
| B30B 15/30                                                              | B32B 7/12                                                                                                                          | (47) 14.07.2021                                                                              |
| (11) EP3165355                                                          | B32B 15/04                                                                                                                         | (87) IB2015001235                                                                            |
| (21) EP16191300.9                                                       | B32B 15/082                                                                                                                        | 25.02.2016                                                                                   |
| (47) 14.07.2021                                                         | B32B 15/085                                                                                                                        | (22) 23.07.2015                                                                              |
| (22) 29.09.2016                                                         | B32B 15/088                                                                                                                        | (54) CLOSURE ARRANGEMENT                                                                     |
| (54) METHOD FOR OPERATING A ROTARY TABLET PRESS AND ROTARY TABLET PRESS | B32B 15/09                                                                                                                         | (73) REHAU AG + Co                                                                           |
| (73) Fette Compacting GmbH                                              | B32B 27/32                                                                                                                         | (72) SCHÖBEL, Michael                                                                        |
| (72) Schmidt, Ingo                                                      | C08K 5/43                                                                                                                          | ZIELKE, Peter                                                                                |
| Özcoban, Hüseyin                                                        | C08L 23/20                                                                                                                         | WILLERT, Manfred                                                                             |
| Heinrich, Thomas                                                        | C08L 51/06                                                                                                                         | (31) 202014103892 U                                                                          |
| (31) 102015116565                                                       | C09J 151/06                                                                                                                        | (32) 21.08.2014                                                                              |
| (32) 30.09.2015                                                         | (11) EP3679105                                                                                                                     | (33) Germany                                                                                 |
| (33) Germany                                                            | (21) EP18762537.1                                                                                                                  |                                                                                              |
| (51) B30B 11/08                                                         | (47) 14.07.2021                                                                                                                    | (51) B32B 3/06                                                                               |
| B30B 15/00                                                              | (87) EP2018074092                                                                                                                  | B61D 17/10                                                                                   |
| B30B 15/06                                                              | 14.03.2019                                                                                                                         | B62D 25/20                                                                                   |
| (11) EP3275639                                                          | (22) 07.09.2018                                                                                                                    | B64C 1/18                                                                                    |
| (21) EP17170464.6                                                       | (54) REACTIVE POLYOLEFIN HOT-MELT ADHESIVE HAVING GOOD ADHESION ON BOTH NON-POLAR AND POLAR SUBSTRATES                             | B64C 1/20                                                                                    |
| (47) 07.07.2021                                                         |                                                                                                                                    | E04F 15/02                                                                                   |
| (22) 10.05.2017                                                         | (73) Sika Technology AG                                                                                                            | (11) EP3536603                                                                               |
| (54) STAMP FOR A ROTARY PRESS                                           | (72) JANKE, Doreen                                                                                                                 | (21) EP19158756.7                                                                            |
| (73) Fette Compacting GmbH                                              | PASCHKOWSKI, Kai                                                                                                                   | (47) 07.07.2021                                                                              |
| (72) Heinrich, Thomas                                                   | CORDES, Mathias                                                                                                                    | (22) 22.02.2019                                                                              |
| Lüdemann, Stefan                                                        | (31) 17190111                                                                                                                      | (54) FLOOR PANELS AND FLOORING SYSTEMS FOR A PASSENGER VEHICLE, AND METHODS FOR INSTALLATION |
| (31) 102016113724                                                       | (32) 08.09.2017                                                                                                                    | (73) The Boeing Company                                                                      |
| (32) 26.07.2016                                                         | (33) European Patent Office (EPO)                                                                                                  | (72) HESSLEWOOD, Sean Richard                                                                |
| (33) Germany                                                            | (51) B32B 1/08                                                                                                                     | MCKENZIE, Howard                                                                             |
| (51) B31D 1/02                                                          | B32B 9/04                                                                                                                          | (31) 201815915732                                                                            |
| B65C 9/00                                                               | B32B 27/06                                                                                                                         | (32) 08.03.2018                                                                              |
| B65H 18/26                                                              | B32B 27/32                                                                                                                         | (33) United States of America                                                                |
| B65H 23/195                                                             | B32B 38/04                                                                                                                         |                                                                                              |
| (11) EP3441333                                                          | F16L 9/147                                                                                                                         | (51) B32B 3/08                                                                               |
| (21) EP18161235.9                                                       | F16L 59/14                                                                                                                         | B32B 15/08                                                                                   |
| (47) 07.07.2021                                                         | F16L 53/32                                                                                                                         | B32B 15/14                                                                                   |
| (22) 12.03.2018                                                         | (11) EP3587891                                                                                                                     | B32B 27/12                                                                                   |
| (54) SCRAP MATRIX WINDING DEVICE FOR CONTINUOUS LABEL PAPER             | (21) EP18186492.7                                                                                                                  | B32B 7/08                                                                                    |
|                                                                         | (47) 14.07.2021                                                                                                                    | (11) EP3224042                                                                               |
|                                                                         |                                                                                                                                    | (21) EP15862176.3                                                                            |
|                                                                         |                                                                                                                                    | (47) 14.07.2021                                                                              |
|                                                                         |                                                                                                                                    | (87) CN2015088888                                                                            |
|                                                                         |                                                                                                                                    | 02.06.2016                                                                                   |

|                                    |                               |                                           |
|------------------------------------|-------------------------------|-------------------------------------------|
| (22) 02.09.2015                    | (72) Kingsford, Kenji         | (54) NONWOVEN FABRIC FOR SOUND-           |
| (54) FIBER-METAL LAMINATE AND ITS  | (31) 201414295310             | ABSORBING MATERIAL AND SOUND-             |
| MANUFACTURING METHOD               | (32) 03.06.2014               | ABSORBING MATERIAL USING SAME             |
| (73) BYD Company Limited           | (33) United States of America | (73) JXTG Nippon Oil & Energy Corporation |
| (72) MAO, Yangen                   | (51) B32B 5/02                | (72) IBAYASHI, Kunihiro                   |
| MAO, Dingwen                       | B32B 5/08                     | HIRAI, Tomoo                              |
| LAN, Pinshuang                     | B32B 5/26                     | KONISHI, Hiroaki                          |
| (31) 201410680802                  | B32B 7/12                     | SHIINA, Muneyuki                          |
| (32) 24.11.2014                    | B32B 25/10                    | ENDO, Ken                                 |
| (33) China                         | B32B 25/16                    | WAKAYAMA, Masahiro                        |
| (51) B32B 3/26                     | B32B 27/12                    | (31) 2016230410                           |
| B32B 3/30                          | B32B 27/18                    | 2017154343                                |
| B32B 19/02                         | B32B 27/20                    | (32) 28.11.2016                           |
| B32B 27/00                         | B32B 27/22                    | 09.08.2017                                |
| B32B 27/08                         | B32B 27/30                    | (33) Japan                                |
| B32B 27/32                         | B32B 27/32                    | Japan                                     |
| B32B 33/00                         | E04D 5/10                     | (51) B32B 5/02                            |
| B32B 38/06                         | (11) EP3483353                | B32B 7/12                                 |
| E04F 15/10                         | (21) EP18204866.0             | B32B 9/02                                 |
| E04F 15/16                         | (47) 07.07.2021               | B32B 27/12                                |
| (11) EP3446873                     | (22) 07.11.2018               | B32B 27/36                                |
| (21) EP18199139.9                  | (54) FIRE RESISTANT COMPOSITE | (11) EP3388229                            |
| (47) 07.07.2021                    | ROOFING MEMBRANE              | (21) EP18166368.3                         |
| (22) 09.01.2015                    | (73) Milliken & Company       | (47) 14.07.2021                           |
| (54) DECORATIVE SHEET AND          | (72) Wenstrup, David E.       | (22) 09.04.2018                           |
| DECORATIVE PLATE, AND              | (31) 201762583775 P           | (54) BREAKABLE FILM FOR CAPSULES          |
| PROCESSES FOR PRODUCING SAME       | (32) 09.11.2017               | WITH EXTRACTABLE SUBSTANCES               |
| (73) DAI NIPPON PRINTING CO., LTD. | (33) United States of America | AND CAPSULE SEALED WITH SUCH              |
| (72) OONO, Tatsuya                 | (51) B32B 5/02                | FILM                                      |
| HORIO, Yoshiaki                    | B32B 5/18                     | (73) Corapack S.R.L.                      |
| (31) 2014003649                    | B32B 7/12                     | (72) RADICE, Massimo                      |
| 2014003666                         | B32B 27/06                    | RADICE, Fabrizio                          |
| 2014195342                         | B32B 27/08                    | (31) 201700039800                         |
| 2014195353                         | B32B 27/10                    | (32) 11.04.2017                           |
| (32) 10.01.2014                    | B32B 27/12                    | (33) Italy                                |
| 10.01.2014                         | B32B 27/36                    | (51) B32B 5/18                            |
| 25.09.2014                         | B32B 29/00                    | C08J 9/28                                 |
| 25.09.2014                         | B32B 29/02                    | C08L 83/05                                |
| (33) Japan                         | B32B 7/06                     | C08L 83/07                                |
| Japan                              | (11) EP3735348                | (11) EP3441422                            |
| Japan                              | (21) EP19701741.1             | (21) EP17778891.6                         |
| Japan                              | (47) 14.07.2021               | (47) 07.07.2021                           |
| (51) B32B 5/00                     | (87) PL2019050001             | (87) JP2017007400                         |
| B32B 5/02                          | 11.07.2019                    | 12.10.2017                                |
| B32B 5/10                          | (22) 04.01.2019               | (22) 27.02.2017                           |
| B32B 5/28                          | (54) UNDERLAY MAT FOR FLOOR   | (54) USE OF SUCTION CHUCKING              |
| B32B 7/10                          | COVERINGS                     | TEMPORARY FIXING MEMBER                   |
| B32B 9/00                          | (73) Decora Spółka Akcyjna    | (73) Nitto Denko Corporation              |
| B32B 9/04                          | (72) MALINOWSKI, Sebastian    | (31) 2016076598                           |
| B32B 27/00                         | LOWINSKI, Michal              | (32) 06.04.2016                           |
| B32B 27/06                         | (31) 42413918                 | (33) Japan                                |
| B32B 27/08                         | (32) 05.01.2018               | (51) B32B 7/12                            |
| B32B 27/12                         | (33) Poland                   | B32B 27/08                                |
| B32B 27/18                         | (51) B32B 5/02                | B32B 27/10                                |
| B32B 7/00                          | B32B 5/26                     | B32B 27/30                                |
| B32B 7/02                          | B60R 13/08                    | B32B 27/32                                |
| B32B 7/04                          | G10K 11/162                   | B32B 27/36                                |
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| (21) EP15808483.0                  | D04H 3/016                    | B65B 7/28                                 |
| (47) 14.07.2021                    | D04H 3/04                     | B65B 51/26                                |
| (87) US2015033842                  | D04H 3/14                     | B65D 5/06                                 |
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| (22) 02.06.2015                    | (21) EP17874030.4             | B65D 5/62                                 |
| (54) METHOD FOR MAKING A COMPOSITE | (47) 14.07.2021               | B65D 5/74                                 |
| STRUCTURE UTILIZING THERMAL        | (87) JP2017042683             | B65D 8/00                                 |
| PROPERTIES OF FORMING              | 31.05.2018                    | B65D 75/12                                |
| ELEMENTS                           | (22) 28.11.2017               | B65D 75/48                                |
| (73) Kingsford, Kenji              |                               | B65D 85/72                                |

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| B65B 9/20                                      | KOBAYASHI, Masanori               | (22) 17.07.2018                    |
| (11) EP3368300                                 | (31) 2010268524                   | (54) THERMOPLASTIC FILM FOR        |
| (21) EP16785501.4                              | 2011126321                        | LAMINATED GLASS                    |
| (47) 07.07.2021                                | 2011139420                        | (73) SAINT-GOBAIN GLASS FRANCE     |
| (87) EP2016075696                              | (32) 01.12.2010                   | (72) ARNDT, Martin                 |
| 04.05.2017                                     | 06.06.2011                        | CAPPUCCILLI, Michele               |
| (22) 25.10.2016                                | 23.06.2011                        | VON AVENARIUS, Wolfgang            |
| (54) LAMINATED PACKAGING MATERIAL              | (33) Japan                        | YEH, Li-Ya                         |
| COMPRISING A BARRIER FILM                      | Japan                             | (31) 17183444                      |
| AND PACKAGING CONTAINERS                       | Japan                             | (32) 27.07.2017                    |
| MANUFACTURED THEREFROM                         | (51) B32B 9/02                    | (33) European Patent Office (EPO)  |
| (73) Tetra Laval Holdings & Finance S.A.       | B32B 9/04                         | (51) B32B 17/10                    |
| (72) LORENZETTI, Cesare                        | (11) EP3535120                    | B32B 27/08                         |
| FAYET, Pierre                                  | (21) EP17792028.7                 | B32B 27/22                         |
| ROCHAT, Gil                                    | (47) 07.07.2021                   | B60J 1/00                          |
| BERGERIOUX, Claude                             | (87) EP2017077569                 | C03C 27/12                         |
| (31) PCT/EP2015/192211                         | 11.05.2018                        | B32B 7/02                          |
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| PCT/EP2015/192208                              | (54) COMPOSITE MATERIAL, IN       | (21) EP17802713.2                  |
| (32) 29.10.2015                                | PARTICULAR FOR SPORTS             | (47) 07.07.2021                    |
| 29.10.2015                                     | EQUIPMENT                         | (87) JP2017018901                  |
| 29.10.2015                                     | (73) Bufo Technology UG           | 30.11.2017                         |
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| World Intellectual Property Office (WIPO)      | (31) 102016120931                 | (54) LAMINATED GLASS               |
| World Intellectual Property Office (WIPO)      | (32) 03.11.2016                   | (73) AGC INC.                      |
| (51) B32B 7/12                                 | (33) Germany                      | (72) NAKAMURA, Atsushi             |
| B32B 27/08                                     | (51) B32B 17/06                   | (31) 2016103999                    |
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| (87) EP2018077516                              | (47) 07.07.2021                   | B60Q 1/52                          |
| 18.04.2019                                     | (87) EP2017056135                 | B60Q 9/00                          |
| (22) 09.10.2018                                | 21.09.2017                        | C03C 27/12                         |
| (54) USE OF HIGH BARRIER AND                   | (22) 15.03.2017                   | F21V 33/00                         |
| PEELABLE POLYESTER FILM FOR                    | (54) EXTERIOR GLASS TRIM ELEMENT  | G09F 13/20                         |
| TRAY LIDDING, DUAL OVENABLE                    | FOR VEHICLE                       | G09F 13/22                         |
| PACKAGING APPLICATIONS AND                     | (73) AGC Glass Europe             | B60Q 3/208                         |
| TRAY LIDDING DUAL OVENABLE                     | (72) GERVELMEYER, Rolf            | (11) EP3463867                     |
| PACKAGES OBTAINED THEREFROM                    | (31) 16160906                     | (21) EP17730850.9                  |
| (73) Cryovac, LLC                              | (32) 17.03.2016                   | (47) 07.07.2021                    |
| (72) PEREGO, Vittorio                          | (33) European Patent Office (EPO) | (87) FR2017051193                  |
| STRACUZZI, Serena                              | (51) B32B 17/06                   | 30.11.2017                         |
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| (32) 09.10.2017                                | E06B 9/24                         | (54) GLAZING WITH LIGHT SIGNALING, |
| (33) European Patent Office (EPO)              | G02B 5/28                         | VEHICLE COMPRISING IT AND          |
| (51) B32B 9/00                                 | G02F 1/13                         | MANUFACTURE                        |
| B32B 27/30                                     | G02F 1/133                        | (73) SAINT-GOBAIN GLASS FRANCE     |
| B32B 27/40                                     | G02F 1/1339                       | (72) BAUERLE, Pascal               |
| B65D 81/34                                     | (11) EP2923235                    | GILLESSEN, Stephan                 |
| C08J 5/22                                      | (21) EP13856805.0                 | BRIS, Jean-Jacques                 |
| C08L 39/04                                     | (47) 07.07.2021                   | (31) 1654732                       |
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| C08J 7/04                                      | (22) 18.11.2013                   | (51) B32B 17/10                    |
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| (21) EP11846034.4                              | (73) Nexeon Energy Solutions LLC  | F21V 8/00                          |
| (47) 07.07.2021                                | (72) FERNANDO, Pirmal, M.         | F21V 23/00                         |
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| (54) MULTILAYER FILM                           | (33) United States of America     | (47) 14.07.2021                    |
| (73) TOYOBO CO., LTD.                          | (51) B32B 17/10                   | (87) FR2014050381                  |
| (72) YAMAZAKI, Atsushi                         | (11) EP3658371                    | 04.09.2014                         |
| INAGAKI, Kyoko                                 | (21) EP18740234.2                 | (22) 24.02.2014                    |
| OOKAWA, Takeshi                                | (47) 14.07.2021                   | (54) REINFORCED OPENING OF A       |
| MORIHARA, Yoshiharu                            | (87) EP2018069372                 | GLAZING                            |
| TAKATSU, Youji                                 | 31.01.2019                        | (73) SAINT-GOBAIN GLASS FRANCE     |

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| (72) CLAUSE, Thomas<br>HENNION, Alexandre                                                                      | (32) 08.10.2015                                          | 14.06.2018                                                                                                   |
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| (32) 26.02.2013                                                                                                | (51) B32B 18/00                                          | (54) MULTILAYER FILMS AND METHODS<br>OF MAKING THE SAME                                                      |
| (33) France                                                                                                    | C04B 35/581                                              | (73) ExxonMobil Chemical Patents Inc.                                                                        |
| (51) B32B 17/10                                                                                                | C04B 37/00                                               | (72) ZHU, Zhen-Yu                                                                                            |
| G02B 27/01                                                                                                     | (11) EP3406583                                           | WANG, Xiao-Chuan                                                                                             |
| (11) EP3412448                                                                                                 | (21) EP17756656.9                                        | OHLSSON, Stefan, B.                                                                                          |
| (21) EP18175149.6                                                                                              | (47) 14.07.2021                                          | VAN LOON, Achiël, Jos                                                                                        |
| (47) 07.07.2021                                                                                                | (87) JP2017007163                                        | ZHANG, Xin, Yue                                                                                              |
| (22) 30.05.2018                                                                                                | 31.08.2017                                               | MARTIN-GATUIS, Michael                                                                                       |
| (54) LAMINATED GLASS                                                                                           | (22) 24.02.2017                                          | (31) 201662430638 P                                                                                          |
| (73) AGC Inc.                                                                                                  | (54) CERAMIC BONDED BODY                                 | 17153169                                                                                                     |
| (72) Sadakane, Shunsuke                                                                                        | (73) Kyocera Corporation                                 | (32) 06.12.2016                                                                                              |
| Oosumi, Shunpei                                                                                                | (72) NAKAMURA, Kiyotaka                                  | 26.01.2017                                                                                                   |
| (31) 2017109820                                                                                                | MORIYAMA, Masayuki                                       | (33) United States of America                                                                                |
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| (33) Japan                                                                                                     | (51) B32B 25/08                                          | B32B 27/30                                                                                                   |
| Japan                                                                                                          | B32B 25/18                                               | B32B 27/36                                                                                                   |
| (51) B32B 18/00                                                                                                | B32B 27/08                                               | C09D 4/02                                                                                                    |
| C01G 45/12                                                                                                     | B32B 27/18                                               | F25D 23/00                                                                                                   |
| C01G 51/00                                                                                                     | B32B 27/22                                               | C08J 7/04                                                                                                    |
| C01G 53/00                                                                                                     | B32B 27/28                                               | (11) EP3381683                                                                                               |
| C04B 35/01                                                                                                     | B32B 27/30                                               | (21) EP16868622.8                                                                                            |
| C04B 35/64                                                                                                     | B32B 27/32                                               | (47) 14.07.2021                                                                                              |
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| C04B 41/45                                                                                                     | B32B 27/36                                               | 01.06.2017                                                                                                   |
| C04B 41/87                                                                                                     | B32B 27/40                                               | (22) 24.11.2016                                                                                              |
| H01M 4/36                                                                                                      | (11) EP3656554                                           | (54) DOOR BODY                                                                                               |
| H01M 4/62                                                                                                      | (21) EP19208340.0                                        | (73) Riken Technos Corporation                                                                               |
| H01M 4/505                                                                                                     | (47) 07.07.2021                                          | (72) WASHIO, Nozomu                                                                                          |
| H01M 4/525                                                                                                     | (22) 11.11.2019                                          | HASHIMOTO, Taketo                                                                                            |
| H01M 10/0525                                                                                                   | (54) PASSIVE ANTI-ICING AND/OR<br>DEICING SYSTEMS        | NAKAJIMA, Shoko                                                                                              |
| (11) EP3458428                                                                                                 | (73) Goodrich Corporation                                | INOMATA, Hitomi                                                                                              |
| (21) EP17724783.0                                                                                              | (72) GANGLOFF, John J.                                   | (31) 2015229330                                                                                              |
| (47) 14.07.2021                                                                                                | TAYLOR, Andrew                                           | 2016029583                                                                                                   |
| (87) EP2017061123                                                                                              | MULLEN, James                                            | 2016046959                                                                                                   |
| 23.11.2017                                                                                                     | GROLMAN, Danielle L.                                     | (32) 25.11.2015                                                                                              |
| (22) 10.05.2017                                                                                                | WALSH, Peter J.                                          | 19.02.2016                                                                                                   |
| (54) OPEN VESSELS AND THEIR USE                                                                                | (31) 201816198179                                        | 10.03.2016                                                                                                   |
| (73) BASF SE                                                                                                   | (32) 21.11.2018                                          | (33) Japan                                                                                                   |
| (72) KALO, Benedikt                                                                                            | (33) United States of America                            | Japan                                                                                                        |
| (31) 16170132                                                                                                  | (51) B32B 27/00                                          | Japan                                                                                                        |
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| C04B 35/573                                                                                                    | 26.04.2012                                               | (87) GB2012000240                                                                                            |
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| C04B 35/80                                                                                                     | (54) GLITTERING RESIN COMPOSITION<br>AND DECORATED SHEET | (22) 13.03.2012                                                                                              |
| (11) EP3153484                                                                                                 | (73) Mitsubishi Chemical Corporation                     | (54) FILM COMPRISING A STRIPPABLE<br>SACRIFICIAL LAYER FOR REDUCTION<br>OF SURFACE DEFECTS IN A<br>SUBSTRATE |
| (21) EP16192480.8                                                                                              | (72) YOKOGI Masashi                                      | (73) DUPONT TEIJIN FILMS U.S. LIMITED<br>PARTNERSHIP                                                         |
| (47) 07.07.2021                                                                                                | KITADE Taku                                              | (72) EVESON, Robert                                                                                          |
| (22) 05.10.2016                                                                                                | EBITANI Toshiaki                                         | RAKOS, Karl                                                                                                  |
| (54) CERAMIC MATRIX COMPOSITE<br>COMPONENT AND PROCESS OF<br>PRODUCING A CERAMIC MATRIX<br>COMPOSITE COMPONENT | (31) 2010235940                                          | TUFFIN, Damian Peter                                                                                         |
| (73) General Electric Company                                                                                  | (32) 20.10.2010                                          | HOY, Dominic                                                                                                 |
| (72) MORGAN, Victor John                                                                                       | (33) Japan                                               | (31) 201104565                                                                                               |
| KITTLESON, Jacob John                                                                                          | (51) B32B 27/08                                          | (32) 17.03.2011                                                                                              |
| GARCIA-CRESPO, Andres Jose                                                                                     | B32B 27/32                                               | (33) United Kingdom                                                                                          |
| LACY, Benjamin Paul                                                                                            | (11) EP3551451                                           | (51) B32B 27/30                                                                                              |
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| C08J 5/18                             | (73) Champion Link International Corporation | (21) EP18714791.3                             |
| (11) EP3632968                        | (72) BAERT, Thomas Luc Martine               | (47) 07.07.2021                               |
| (21) EP18810655.3                     | DREVET, Anthony                              | (87) EP2018058952                             |
| (47) 07.07.2021                       | VAN POYER, Tom                               | 18.10.2018                                    |
| (87) JP2018020924                     | (31) 2016223                                 | (22) 09.04.2018                               |
| 06.12.2018                            | (32) 04.02.2016                              | (54) METHOD AND APPARATUS FOR 3D              |
| (22) 31.05.2018                       | (33) Netherlands                             | PRINTING A 3D ITEM                            |
| (54) VINYLIDENE-FLUORIDE RESIN FILM   | (51) B32B 37/12                              | (73) Signify Holding B.V.                     |
| (73) Denka Company Limited            | B32B 38/18                                   | (72) HIKMET, Rifat, Ata, Mustafa              |
| (72) NAGAOKA, Kouta                   | (11) EP3357691                               | (31) 17166399                                 |
| SAWASATO, Tadashi                     | (21) EP18153586.5                            | (32) 13.04.2017                               |
| TAKANO, Keiji                         | (47) 14.07.2021                              | (33) European Patent Office (EPO)             |
| (31) 2017109060                       | (22) 26.01.2018                              | (51) B33Y 10/00                               |
| (32) 01.06.2017                       | (54) DEVICE FOR PRODUCING A CARPET           | B33Y 50/02                                    |
| (33) Japan                            | (73) ITD Vertriebsgesellschaft m.b.H.        | B29C 64/129                                   |
| (51) B32B 27/32                       | (72) Dlouhy, Thomas                          | B29C 64/135                                   |
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| (54) HEAT-SHRINKABLE LABEL            | B29C 64/30                                   | (22) 26.08.2016                               |
| (73) Basell Poliolefine Italia S.r.l. | B33Y 70/00                                   | (54) TECHNIQUES FOR ADDITIVE                  |
| (72) MASSARI, Paola                   | (11) EP3592532                               | FABRICATION PROCESS                           |
| FELISATI, Andrea                      | (21) EP18705955.5                            | OPTIMIZATION AND RELATED                      |
| IZZU, Marco                           | (47) 07.07.2021                              | SYSTEMS AND METHODS                           |
| BASSI, Paolo                          | (87) EP2018054678                            | (73) Formlabs, Inc.                           |
| CAVALIERI, Claudio                    | 13.09.2018                                   | (72) FRANTZDALE, Ben                          |
| (31) 17200780                         | (22) 26.02.2018                              | THOMAS, Steven                                |
| (32) 09.11.2017                       | (54) CORE-SHELL FILAMENT FOR                 | SOHN, Nicholas, M.                            |
| (33) European Patent Office (EPO)     | PRINTING SMOOTH FDM 3D ITEMS                 | (31) 201562211352 P                           |
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| C08J 5/04                             | (72) HIKMET, Rifat, Ata, Mustafa             | (33) United States of America                 |
| C08J 5/18                             | VAN HAL, Paulus, Albertus                    | (51) B33Y 10/00                               |
| B42D 25/00                            | (31) 17160091                                | B33Y 50/02                                    |
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| (22) 04.02.2015                       | B29C 64/153                                  | (87) US2014066120                             |
| (54) METHOD FOR PRODUCING A           | B29C 64/268                                  | 04.06.2015                                    |
| POLYMER LAYER HAVING AT               | B29C 64/30                                   | (22) 18.11.2014                               |
| LEAST ONE FINELY DIVIDED SOLID        | B29C 64/386                                  | (54) METHOD FOR FORMING THREE-                |
| CONTAINED THEREIN AND METHOD          | B33Y 40/00                                   | DIMENSIONAL OBJECTS USING                     |
| FOR PRODUCING A FILM BODY             | B22F 3/00                                    | LINEAR SOLIDIFICATION WITH                    |
| (73) Bundesdruckerei GmbH             | (11) EP3495143                               | CONTOURLESS OBJECT DATA                       |
| (72) GUTMANN, Roland                  | (21) EP17206268.9                            | (73) Global Filtration Systems, A DBA of Gulf |
| KRÜGER, Per                           | (47) 07.07.2021                              | Filtration Systems Inc.                       |
| (31) 102014203080                     | (22) 08.12.2017                              | (72) EL-SIBLANI, Ali                          |
| (32) 20.02.2014                       | (54) APPARATUS AND METHOD FOR                | SHKOLNIK, Alexandr                            |
| (33) Germany                          | ADDITIVELY MANUFACTURING                     | NAM, Alexander                                |
| (51) B32B 37/04                       | THREE-DIMENSIONAL OBJECTS                    | JANBAIN, Mohamad                              |
| B32B 37/15                            | (73) CL Schutzrechtsverwaltungs GmbH         | (31) 201314091683                             |
| E04F 13/077                           | (72) Bokkes, Tobias                          | (32) 27.11.2013                               |
| E04F 13/08                            | Schumann, Philipp                            | (33) United States of America                 |
| E04F 15/02                            | Hunze, Stephan                               | (51) B33Y 30/00                               |
| E04F 15/10                            | Klaußner, Tim                                | B29C 67/00                                    |
| (11) EP3411539                        | Zeulner, Fabian                              | B33Y 40/00                                    |
| (21) EP16797914.5                     | Ebert, Marie-Christin                        | (11) EP3386721                                |
| (47) 14.07.2021                       | (51) B33Y 10/00                              | (21) EP16722665.3                             |
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| (22) 17.11.2016                       | B29C 64/106                                  | 16.11.2017                                    |
| (54) WATERPROOF PANEL, PROCESS FOR    | B29C 64/209                                  | (22) 12.05.2016                               |
| PRODUCING A PANEL, AND PANEL          | B29C 64/336                                  | (54) OUTLET STRUCTURE                         |
| OBTAINABLE BY SAID PROCESS            | (11) EP3609680                               |                                               |

|                                                                                     |                                                                              |                                          |
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| (73) Hewlett-Packard Development Company, L.P.                                      | PRINTING PLATE, AND PRINTING METHOD                                          | (51) B41F 16/00                          |
| (72) CHANCLON, Ismael                                                               | (73) FUJIFILM Corporation                                                    | B41F 16/02                               |
| ALONSO, Xavier                                                                      | (72) NAKAMURA, Ryo                                                           | D06C 15/10                               |
| JONES POPPESCOU, Ernesto, Alejandro                                                 | MATSUURA, Atsushi                                                            | D06C 23/00                               |
|                                                                                     | HIROKAWA, Tsuyoshi                                                           | D06F 75/24                               |
| (51) B33Y 50/02                                                                     | (31) 2017166624                                                              | D06F 75/26                               |
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| B33Y 40/00                                                                          | (32) 31.08.2017                                                              | D06F 75/38                               |
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| (47) 07.07.2021                                                                     | Japan                                                                        | (21) EP18821978.6                        |
| (87) US2016032138                                                                   | (51) B41F 15/08                                                              | (47) 14.07.2021                          |
| 16.11.2017                                                                          | B41F 15/42                                                                   | (87) US2018044799                        |
| (22) 12.05.2016                                                                     | B41F 31/02                                                                   | 07.02.2019                               |
| (54) TRACKING COOLING TIME FOR 3D PRINTING TROLLEY                                  | B41F 31/22                                                                   | (22) 01.08.2018                          |
| (73) Hewlett-Packard Development Company, L.P.                                      | (11) EP3569415                                                               | (54) HEAT PRESS                          |
| (72) TORRENT, Anna                                                                  | (21) EP19000228.7                                                            | (73) Cricut, Inc.                        |
| DE SANTIAGO DOMINGUEZ, Sergio                                                       | (47) 07.07.2021                                                              | (72) STOPP, Grayson                      |
| FERRAN FARRES, Marina                                                               | (22) 13.05.2019                                                              | CRISP, Thomas                            |
|                                                                                     | (54) SCREEN PRINTING MACHINE AND SCREEN PRINTING METHOD WITH A ROTARY SCREEN | LIN, Lk                                  |
| (51) B41C 1/00                                                                      | (73) Giesecke+Devrient Currency Technology GmbH                              | ZHU, Carry                               |
| B41C 1/10                                                                           | (72) Mayer, Karlheinz                                                        | (31) 201762540021 P                      |
| B41F 27/00                                                                          | Wiesnet, Adolf                                                               | (32) 01.08.2017                          |
| (11) EP3564036                                                                      | Voit, Max                                                                    | (33) United States of America            |
| (21) EP18170503.9                                                                   | (31) 102018004024                                                            | (51) B41J 2/01                           |
| (47) 07.07.2021                                                                     | (32) 16.05.2018                                                              | B41J 2/14                                |
| (22) 03.05.2018                                                                     | (33) Germany                                                                 | B41J 2/17                                |
| (54) AUTOMATIC PRINTING PLATE SORTING                                               | (51) B41F 15/08                                                              | B41J 2/175                               |
| (73) Heidelberger Druckmaschinen AG                                                 | B41F 15/42                                                                   | (11) EP3209500                           |
| (72) von Spreckelsen, Meino                                                         | H05K 3/12                                                                    | (21) EP15852260.7                        |
| Bauch, Sebastian                                                                    | (11) EP3611020                                                               | (47) 14.07.2021                          |
| (51) B41C 1/05                                                                      | (21) EP18737404.6                                                            | (87) JP2015005234                        |
| B41N 1/12                                                                           | (47) 07.07.2021                                                              | 28.04.2016                               |
| G03F 7/00                                                                           | (87) IB2018000475                                                            | (22) 16.10.2015                          |
| G03F 7/004                                                                          | 18.10.2018                                                                   | (54) PRINT CARTRIDGE AND INKJET PRINTER  |
| G03F 7/09                                                                           | (22) 13.04.2018                                                              | (73) Funai Electric Co., Ltd.            |
| G03F 7/095                                                                          | (54) AUTOMATIC SOLDER PASTE ADDITION APPARATUS FOR SOLDER PASTE PRINTER      | (72) MARRA, Michael                      |
| G03F 7/11                                                                           | (73) Illinois Tool Works Inc.                                                | (31) 201414519921                        |
| G03F 7/20                                                                           | (72) YANG, Ning                                                              | (32) 21.10.2014                          |
| (11) EP3693794                                                                      | (31) 201720395641 U                                                          | (33) United States of America            |
| (21) EP20163134.8                                                                   | 201710244587                                                                 | (51) B41J 2/01                           |
| (47) 14.07.2021                                                                     | (32) 14.04.2017                                                              | B41J 2/175                               |
| (22) 28.03.2017                                                                     | 14.04.2017                                                                   | B41J 2/19                                |
| (54) FLEXOGRAPHIC PRINTING PLATE                                                    | (33) China                                                                   | B41J 29/38                               |
| (73) Asahi Kasei Kabushiki Kaisha                                                   | China                                                                        | (11) EP3480021                           |
| (72) Ichihashi, Ryo                                                                 | (51) B41F 15/46                                                              | (21) EP17819884.2                        |
| (31) 2016074581                                                                     | B41F 31/04                                                                   | (47) 14.07.2021                          |
| (32) 01.04.2016                                                                     | B41F 31/22                                                                   | (87) JP2017022170                        |
| (33) Japan                                                                          | H03K 3/12                                                                    | 04.01.2018                               |
| (51) B41C 1/10                                                                      | (11) EP3569416                                                               | (22) 15.06.2017                          |
| B41N 1/08                                                                           | (21) EP19000229.5                                                            | (54) PRINTING DEVICE AND PRINTING METHOD |
| B41N 3/03                                                                           | (47) 07.07.2021                                                              | (73) Seiko Epson Corporation             |
| G03F 7/00                                                                           | (22) 13.05.2019                                                              | (72) HIRAMOTO Goki                       |
| G03F 7/09                                                                           | (54) SQUEEGEE FOR SCREEN PRINTING                                            | (31) 2016131768                          |
| G03F 7/095                                                                          | (73) Giesecke+Devrient Currency Technology GmbH                              | (32) 01.07.2016                          |
| G03F 7/11                                                                           | (72) Mayer, Karlheinz                                                        | (33) Japan                               |
| (11) EP3476616                                                                      | Wiesnet, Adolf                                                               | (51) B41J 2/01                           |
| (21) EP18789307.8                                                                   | Voit, Max                                                                    | B41M 1/00                                |
| (47) 14.07.2021                                                                     | (31) 102018003919                                                            | B41M 5/00                                |
| (87) JP2018021066                                                                   | (32) 16.05.2018                                                              | C08F 220/18                              |
| 07.03.2019                                                                          | (33) Germany                                                                 | C08F 220/54                              |
| (22) 31.05.2018                                                                     |                                                                              | C09D 11/107                              |
| (54) LITHOGRAPHIC PRINTING PLATE PRECURSOR, METHOD FOR MANUFACTURING A LITHOGRAPHIC |                                                                              | C09D 11/322                              |
|                                                                                     |                                                                              | C09D 11/324                              |
|                                                                                     |                                                                              | (11) EP3494150                           |
|                                                                                     |                                                                              | (21) EP17894844.4                        |

|                                                                 |                                                                                                 |                                                               |
|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| (47) 07.07.2021                                                 | RUBIN, Shimrit                                                                                  | (54) LIQUID EJECTION HEAD AND LIQUID                          |
| (87) US2017015902                                               | PINKESFELD, Or                                                                                  | EJECTION DEVICE                                               |
| 09.08.2018                                                      | SAMOSHIN, Marisa                                                                                | (73) Konica Minolta, Inc.                                     |
| (22) 31.01.2017                                                 | TSAO, Yi-Hua                                                                                    | (72) YAMAGUCHI, Hironobu                                      |
| (54) LATEX POLYMER                                              | COHEN, Eytan                                                                                    | MATSUO, Takashi                                               |
| (73) Hewlett-Packard Development Company, L.P.                  | (51) B41J 2/125                                                                                 | (31) 2017121816                                               |
| (72) INGLE, David Michael                                       | B41J 2/21                                                                                       | (32) 22.06.2017                                               |
| CAGLE, Phillip C.                                               | B41J 19/14                                                                                      | (33) Japan                                                    |
| (51) B41J 2/01                                                  | B41J 29/38                                                                                      | (51) B41J 2/14                                                |
| B41M 5/00                                                       | B41J 29/393                                                                                     | B41J 2/175                                                    |
| C09D 11/106                                                     | G01B 11/14                                                                                      | (11) EP3423283                                                |
| C09D 11/30                                                      | (11) EP3098080                                                                                  | (21) EP17710038.5                                             |
| C09D 11/322                                                     | (21) EP16171266.6                                                                               | (47) 07.07.2021                                               |
| C09D 11/326                                                     | (47) 14.07.2021                                                                                 | (87) GB2017050596                                             |
| C09D 11/38                                                      | (22) 25.05.2016                                                                                 | 08.09.2017                                                    |
| C09D 11/54                                                      | (54) IMAGE FORMING APPARATUS, DISTANCE MEASURING METHOD, AND COMPUTER-READABLE RECORDING MEDIUM | (22) 06.03.2017                                               |
| (11) EP3240839                                                  | (73) Ricoh Company, Ltd.                                                                        | (54) DROPLET DEPOSITION HEAD AND MANIFOLD COMPONENTS THEREFOR |
| (21) EP15890999.4                                               | (72) KAWARADA, Masaya                                                                           | (73) Xaar Technology Limited                                  |
| (47) 14.07.2021                                                 | SATOH, Nobuyuki                                                                                 | (72) KANARIS, Athanasios                                      |
| (87) US2015033184                                               | MORITA, Kenji                                                                                   | BROOK, Colin                                                  |
| 03.11.2016                                                      | SAKURADA, Yuichi                                                                                | CAMENO SALINAS, Alfonso                                       |
| (22) 29.05.2015                                                 | SASA, Tomohiro                                                                                  | GARCIA MAZA, Jesus                                            |
| (54) WHITE INKS                                                 | HORIKAWA, Daisaku                                                                               | JEDYNAK, Artur                                                |
| (73) Hewlett-Packard Development Company, L.P.                  | (31) 2015107914                                                                                 | (31) 201603826                                                |
| (72) KASPERCHIK, Vladek                                         | (32) 27.05.2015                                                                                 | (32) 04.03.2016                                               |
| BRUINSMA, Paul Joseph                                           | (33) Japan                                                                                      | (33) United Kingdom                                           |
| BUTLER, Thomas W.                                               | (51) B41J 2/14                                                                                  | (51) B41J 2/14                                                |
| (31) PCT/US2015/027743                                          | (11) EP3199353                                                                                  | B41J 2/175                                                    |
| PCT/US2015/027793                                               | (21) EP16768701.1                                                                               | (11) EP3405349                                                |
| (32) 27.04.2015                                                 | (47) 14.07.2021                                                                                 | (21) EP16886709.1                                             |
| 27.04.2015                                                      | (87) JP2016058783                                                                               | (47) 14.07.2021                                               |
| (33) World Intellectual Property Office (WIPO)                  | 29.09.2016                                                                                      | (87) US2016014102                                             |
| World Intellectual Property Office (WIPO)                       | (22) 18.03.2016                                                                                 | 27.07.2017                                                    |
| (51) B41J 2/045                                                 | (54) LIQUID DISCHARGING HEAD AND RECORDING DEVICE                                               | (22) 20.01.2016                                               |
| (11) EP3339033                                                  | (73) Kyocera Corporation                                                                        | (54) ENERGY EFFICIENT PRINTHEADS                              |
| (21) EP17208449.3                                               | (72) KOBAYASHI, Naoki                                                                           | (73) Hewlett-Packard Development Company, L.P.                |
| (47) 07.07.2021                                                 | (31) 2015059680                                                                                 | (72) CHEN, Zhizhang                                           |
| (22) 19.12.2017                                                 | (32) 23.03.2015                                                                                 | SHAARAWI, Mohammed                                            |
| (54) LIQUID EJECTING APPARATUS AND CIRCUIT BOARD                | (33) Japan                                                                                      | BOLF, Brian                                                   |
| (73) Seiko Epson Corporation                                    | (51) B41J 2/14                                                                                  | KRAUSE, Paul                                                  |
| (72) KITAZAWA, Koji                                             | (11) EP3599097                                                                                  | (51) B41J 2/14                                                |
| NOZAWA, Dai                                                     | (21) EP19187006.2                                                                               | B41J 2/175                                                    |
| KASHIMURA, Toru                                                 | (47) 14.07.2021                                                                                 | B41J 2/18                                                     |
| (31) 2016248824                                                 | (22) 18.07.2019                                                                                 | (11) EP3670192                                                |
| (32) 22.12.2016                                                 | (54) INK JET HEAD AND INK JET RECORDING DEVICE                                                  | (21) EP19218005.7                                             |
| (33) Japan                                                      | (73) Toshiba Tec Kabushiki Kaisha                                                               | (47) 07.07.2021                                               |
| (51) B41J 2/05                                                  | (72) KANEKO, Yoshiaki                                                                           | (22) 19.12.2019                                               |
| B41J 2/175                                                      | TOYAMA, Akimasa                                                                                 | (54) LIQUID EJECTING HEAD AND LIQUID EJECTING APPARATUS       |
| C09D 11/12                                                      | IJIMA, Tomomi                                                                                   | (73) Seiko Epson Corporation                                  |
| C09D 175/04                                                     | (31) 2018139127                                                                                 | (72) TAMAI, Shotaro                                           |
| C09D 11/102                                                     | (32) 25.07.2018                                                                                 | UCHIDA, Kazuaki                                               |
| C09D 11/322                                                     | (33) Japan                                                                                      | TANIUCHI, Akinori                                             |
| (11) EP3458529                                                  | (51) B41J 2/14                                                                                  | (31) 2018239222                                               |
| (21) EP16918803.4                                               | B41J 2/16                                                                                       | (32) 21.12.2018                                               |
| (47) 14.07.2021                                                 | B41J 2/175                                                                                      | (33) Japan                                                    |
| (87) US2016056300                                               | B41J 2/18                                                                                       | (51) B41J 2/14                                                |
| 19.04.2018                                                      | (11) EP3643503                                                                                  | B41J 2/18                                                     |
| (22) 10.10.2016                                                 | (21) EP18821486.0                                                                               | (11) EP3248783                                                |
| (54) LIQUID INK CONTAINING POLYTETRAFLUOROETHYLENE WAX EMULSION | (47) 07.07.2021                                                                                 | (21) EP16740314.6                                             |
| (73) Hewlett-Packard Development Company, L.P.                  | (87) JP2018020754                                                                               | (47) 07.07.2021                                               |
| (72) YEN, Max                                                   | 27.12.2018                                                                                      | (87) JP2016051945                                             |
| TRUBNIKOV, Alex                                                 | (22) 30.05.2018                                                                                 | 28.07.2016                                                    |
|                                                                 |                                                                                                 | (22) 23.01.2016                                               |
|                                                                 |                                                                                                 | (54) LIQUID DISCHARGE HEAD AND RECORDING DEVICE USING SAME    |



|                                         |                                       |                                      |
|-----------------------------------------|---------------------------------------|--------------------------------------|
| (73) Kyocera Corporation                | (31) 102016106011                     | 26.02.2014                           |
| (72) KOBAYASHI, Naoki                   | (32) 01.04.2016                       | (33) Japan                           |
| KUSHIMA, Yuka                           | (33) Germany                          | Japan                                |
| (31) 2015011433                         | (51) B41J 2/175                       | (51) B41J 2/21                       |
| (32) 23.01.2015                         | B41J 29/13                            | G06K 15/10                           |
| (33) Japan                              | (11) EP3498478                        | (11) EP3547221                       |
| (51) B41J 2/14                          | (21) EP17839401.1                     | (21) EP18164503.7                    |
| H01L 41/08                              | (47) 14.07.2021                       | (47) 07.07.2021                      |
| H01L 41/09                              | (87) JP2017028561                     | (22) 28.03.2018                      |
| H01L 41/187                             | 15.02.2018                            | (54) METHOD FOR PRINTING THE         |
| H01L 41/318                             | (22) 07.08.2017                       | SURFACE OF AN OBJECT                 |
| (11) EP3514843                          | (54) LIQUID CONTAINER                 | (73) Heidelberger Druckmaschinen AG  |
| (21) EP18214082.2                       | (73) Seiko Epson Corporation          | (72) Ernst, Uwe                      |
| (47) 14.07.2021                         | (72) NAGASHIMA Takumi                 | (51) B41J 2/325                      |
| (22) 19.12.2018                         | KAWATE Hiroyuki                       | B41J 25/304                          |
| (54) PIEZOELECTRIC ELEMENT AND          | SHIMIZU Yoshiaki                      | B41J 25/312                          |
| LIQUID EJECTING HEAD                    | TOYA Akihiro                          | B41J 25/316                          |
| (73) Seiko Epson Corporation            | TAKAMOTO Tetsuya                      | (11) EP3349988                       |
| (72) SAKAI, Tomohiro                    | MIZUTANI Tadahiro                     | (21) EP16770311.5                    |
| MOROZUMI, Koichi                        | OZEKI Hiroyoshi                       | (47) 14.07.2021                      |
| KITADA, Kazuya                          | YAMAGUCHI Manabu                      | (87) GB2016052843                    |
| KOIKE, Harunobu                         | (31) 2016158443                       | 23.03.2017                           |
| SUMI, Koji                              | 2016203316                            | (22) 14.09.2016                      |
| (31) 2017244921                         | (32) 12.08.2016                       | (54) PRINTING APPARATUS AND METHOD   |
| (32) 21.12.2017                         | 17.10.2016                            | (73) Videojet Technologies Inc.      |
| (33) Japan                              | (33) Japan                            | (72) BUXTON, Keith                   |
| (51) B41J 2/155                         | Japan                                 | PFEFFER, Gary                        |
| B41J 2/21                               | (51) B41J 2/175                       | (31) 201516248                       |
| B41J 25/00                              | C12M 1/26                             | 201610627                            |
| B41J 25/34                              | B33Y 10/00                            | (32) 14.09.2015                      |
| (11) EP2913188                          | B33Y 30/00                            | 17.06.2016                           |
| (21) EP15153164.7                       | B29C 64/106                           | (33) United Kingdom                  |
| (47) 14.07.2021                         | B29C 64/209                           | United Kingdom                       |
| (22) 30.01.2015                         | (11) EP3661754                        | (51) B41J 2/325                      |
| (54) Inkjet printhead, inkjet recording | (21) EP18749799.5                     | B41M 5/382                           |
| apparatus, and method for adjusting     | (47) 07.07.2021                       | B41M 5/385                           |
| position of inkjet printhead            | (87) EP2018071189                     | B41M 5/395                           |
| (73) Konica Minolta, Inc.               | 07.02.2019                            | B41M 7/00                            |
| (72) Ueda, Masato                       | (22) 03.08.2018                       | (11) EP3409495                       |
| (31) 2014016798                         | (54) PRINT HEAD OF A PRINTER, PRINTER | (21) EP18171744.8                    |
| (32) 31.01.2014                         | AND PRINTING METHOD                   | (47) 07.07.2021                      |
| (33) Japan                              | (73) Centre National de la Recherche  | (22) 11.05.2018                      |
| (51) B41J 2/175                         | Scientifique                          | (54) GENUINE COLOUR IMAGE, THERMAL   |
| (11) EP3173241                          | Institut Curie                        | TRANSFER FOIL FOR PRODUCING          |
| (21) EP16194974.8                       | Sorbonne Université                   | A GENUINE COLOUR IMAGE AND           |
| (47) 07.07.2021                         | (72) MALAQUIN, Laurent                | METHOD FOR PRODUCING A               |
| (22) 21.10.2016                         | VIOVY, Jean Louis                     | GENUINE COLOUR IMAGE                 |
| (54) METHOD FOR DETECTION OF AN INK     | SOULEILLE, Sandrine                   | (73) Leonhard Kurz Stiftung & Co. KG |
| LEAKAGE IN AN INK JET PRINTER           | DOLLAT, Xavier                        | (72) ÜNAL, Eser Alper                |
| (73) Heidelberger Druckmaschinen AG     | FOURNIE, Victor                       | SCHULZ, Christian                    |
| (72) Gülck, Matthias                    | (31) 1757496                          | HUBER, Thimo                         |
| (31) 102015223032                       | (32) 03.08.2017                       | SCHMIDT, Nobert                      |
| (32) 23.11.2015                         | (33) France                           | KLAGES, Sören                        |
| (33) Germany                            | (51) B41J 2/175                       | (31) 102017110387                    |
| (51) B41J 2/175                         | G03F 7/033                            | (32) 12.05.2017                      |
| B41J 2/18                               | C09D 11/00                            | (33) Germany                         |
| B41J 2/195                              | C09D 11/10                            | (51) B41J 2/355                      |
| (11) EP3436278                          | (11) EP2796519                        | (11) EP3581390                       |
| (21) EP17712766.9                       | (21) EP14165433.5                     | (21) EP19188426.1                    |
| (47) 07.07.2021                         | (47) 07.07.2021                       | (47) 07.07.2021                      |
| (87) EP2017056768                       | (22) 22.04.2014                       | (22) 28.12.2012                      |
| 05.10.2017                              | (54) Photopolymerizable inkjet ink    | (54) METHOD AND APPARATUS FOR        |
| (22) 22.03.2017                         | composition and ink cartridge         | PRINTHEAD CONTROL                    |
| (54) DEVICE AND METHOD FOR INK          | (73) Ricoh Company, Ltd.              | (73) Zebra Technologies Corporation  |
| SUPPLY IN DIGITAL PRINTING              | (72) Hiraoka, Takao                   | (72) HEGARTY, Patrick                |
| (73) Dekron GmbH                        | (31) 2013090043                       | LAMONTAGNE, Michael L                |
| (72) CHOLEWIK, Frank                    | 2014035131                            | (31) 201261583428 P                  |
| SCHNITGER, Thomas                       | (32) 23.04.2013                       | (32) 05.01.2012                      |

|                                         |                                     |                                     |
|-----------------------------------------|-------------------------------------|-------------------------------------|
| (33) United States of America           | (47) 07.07.2021                     | (54) LABEL PROCESSING DEVICE WITH   |
| (51) B41J 2/447                         | (87) JP2016070998                   | PEEL BAR                            |
| B41J 2/455                              | 02.02.2017                          | (73) Zebra Technologies Corporation |
| H01S 5/026                              | (22) 15.07.2016                     | (72) PRELIASCO, Richard J.          |
| H01S 5/183                              | (54) TAPE AND TAPE CARTRIDGE        | LYMAN, Roy P.                       |
| H01S 5/42                               | (73) Brother Kogyo Kabushiki Kaisha | BECK, David F.                      |
| H01L 33/04                              | (72) KATO, Tsutomu                  | HORROCKS, Craig A.                  |
| H01L 33/08                              | NAKAI, Shimako                      | HEGARTY, Patrick J.                 |
| H01L 33/14                              | (31) 2015146728                     | (31) 201213725247                   |
| (11) EP3410496                          | (32) 24.07.2015                     | (32) 21.12.2012                     |
| (21) EP17819626.7                       | (33) Japan                          | (33) United States of America       |
| (47) 07.07.2021                         | (51) B41J 3/407                     | (51) B41J 3/407                     |
| (87) JP2017016234                       | (11) EP3615344                      | D03J 1/04                           |
| 04.01.2018                              | (21) EP18725650.8                   | D04B 35/22                          |
| (22) 24.04.2017                         | (47) 14.07.2021                     | D05B 67/00                          |
| (54) LIGHT-EMITTING COMPONENT, PRINT    | (87) IB2018052895                   | D05C 11/24                          |
| HEAD, IMAGE FORMING DEVICE, AND         | 01.11.2018                          | D06B 1/02                           |
| SEMICONDUCTOR LAYER LAMINATED           | (22) 26.04.2018                     | D06B 23/24                          |
| SUBSTRATE                               | (54) A PRINT BAR STRUCTURE, A       | D06P 5/30                           |
| (73) FUJIFILM Business Innovation Corp. | PRINTING APPARATUS, AND A           | (11) EP3310955                      |
| (72) KONDO Takashi                      | METHOD OF PRINTING                  | (21) EP16812048.3                   |
| (31) 2016129757                         | (73) Pailprint (PTY) Ltd            | (47) 14.07.2021                     |
| (32) 30.06.2016                         | (72) MURRAY, Brian                  | (87) SE2016050588                   |
| (33) Japan                              | (31) 201702909                      | 22.12.2016                          |
| (51) B41J 2/47                          | 201702910                           | (22) 16.06.2016                     |
| G02B 26/10                              | (32) 26.04.2017                     | (54) DEVICE AND METHOD FOR          |
| G02B 26/12                              | 26.04.2017                          | CONTROLLING THE FIXATION OF AN      |
| G03G 15/04                              | (33) South Africa                   | IN-LINE THREAD TREATMENT            |
| G03G 21/16                              | South Africa                        | (73) COLOREEL GROUP AB              |
| H04N 1/113                              | (51) B41J 3/407                     | (72) EKLIND, Martin                 |
| (11) EP3467568                          | B41J 11/00                          | STABERG, Joakim                     |
| (21) EP17802444.4                       | (11) EP3044007                      | (31) 1550842                        |
| (47) 14.07.2021                         | (21) EP14765956.9                   | (32) 17.06.2015                     |
| (87) JP2017014007                       | (47) 14.07.2021                     | (33) Sweden                         |
| 30.11.2017                              | (87) EP2014069599                   | (51) B41J 11/00                     |
| (22) 03.04.2017                         | 19.03.2015                          | (11) EP3156243                      |
| (54) OPTICAL SCANNING DEVICE AND        | (22) 15.09.2014                     | (21) EP16001972.5                   |
| IMAGE FORMING APPARATUS                 | (54) METHOD FOR PRINTING THREE-     | (47) 07.07.2021                     |
| INCLUDING THE SAME                      | DIMENSIONAL SURFACES AND            | (22) 09.09.2016                     |
| (73) Kyocera Document Solutions Inc.    | THREE-DIMENSIONAL PRINTED           | (54) PRINTING METHOD AND PRINTING   |
| (72) SUE Tomohiro                       | OBJECT                              | APPARATUS                           |
| (31) 2016104611                         | (73) Dekron GmbH                    | (73) Canon Kabushiki Kaisha         |
| (32) 25.05.2016                         | (72) TILL, Volker                   | (72) Shinjo, Ryoya                  |
| (33) Japan                              | (31) 102013015098                   | (31) 2015194404                     |
| (51) B41J 3/36                          | (32) 13.09.2013                     | (32) 30.09.2015                     |
| B41J 3/44                               | (33) Germany                        | (33) Japan                          |
| G06F 3/12                               | (51) B41J 3/407                     | (51) B41J 11/00                     |
| (11) EP3461645                          | B41J 11/00                          | (11) EP3771570                      |
| (21) EP18192532.2                       | B41J 29/17                          | (21) EP19189047.4                   |
| (47) 07.07.2021                         | B41J 29/38                          | (47) 14.07.2021                     |
| (22) 04.09.2018                         | (11) EP3213924                      | (22) 30.07.2019                     |
| (54) PRINTER                            | (21) EP17158701.7                   | (54) METHOD FOR TREATING A SHEET IN |
| (73) Fujitsu Component Limited          | (47) 07.07.2021                     | A PRINTER                           |
| (72) OGUCHI, Tatsuya                    | (22) 01.03.2017                     | (73) Heidelberg Druckmaschinen AG   |
| WATANABE, Sumio                         | (54) PRINTING APPARATUS             | (72) Wilhelm, Sebastian             |
| MORI, Yukihiro                          | (73) Seiko Epson Corporation        | Hachmann, Dr. Peter                 |
| (31) 2017177306                         | (72) KANEMOTO, Shuichi              | Hieb, Christian                     |
| (32) 15.09.2017                         | (31) 2016038650                     | Müller, Rolf                        |
| (33) Japan                              | (32) 01.03.2016                     | Schönberger, Wolfgang               |
| (51) B41J 3/36                          | (33) Japan                          | (51) B41J 11/00                     |
| B41J 15/04                              | (51) B41J 3/407                     | B41M 7/00                           |
| B41J 17/32                              | B65C 9/00                           | C09D 11/101                         |
| G09F 3/00                               | B65C 11/02                          | C09D 11/30                          |
| G09F 3/02                               | (11) EP3281880                      | (11) EP3517307                      |
| G09F 3/10                               | (21) EP17187702.0                   | (21) EP19153949.3                   |
| G09F 3/14                               | (47) 07.07.2021                     | (47) 07.07.2021                     |
| (11) EP3327705                          | (22) 27.12.2012                     | (22) 28.01.2019                     |
| (21) EP16830354.3                       |                                     |                                     |

|                                                     |                                                                         |                                                                                            |
|-----------------------------------------------------|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| (54) PRINTING APPARATUS AND PRINTING METHOD         | (22) 07.05.2018                                                         | (32) 29.01.2015                                                                            |
| (73) Mimaki Engineering Co., Ltd.                   | (54) INTAGLIO PRINTING INK, PRINTING PROCESS AND PRINTED ARTICLE        | (33) Japan                                                                                 |
| (72) OHNISHI, Masaru                                | (73) Giesecke+Devrient Currency Technology GmbH                         | (51) B42C 1/12                                                                             |
| (31) 2018013679                                     | (32) 11.05.2017                                                         | B42C 11/02                                                                                 |
| (32) 30.01.2018                                     | (72) KECHT, Johann                                                      | B42C 11/04                                                                                 |
| (33) Japan                                          | STEINLEIN, Stephan                                                      | B42C 19/00                                                                                 |
| (51) B41J 15/04                                     | GIERING, Thomas                                                         | B42C 19/02                                                                                 |
| B41J 17/32                                          | (31) 102017004496                                                       | B42D 15/00                                                                                 |
| B41J 17/42                                          | (32) 11.05.2017                                                         | B65H 45/04                                                                                 |
| B41J 33/00                                          | (33) Germany                                                            | B65H 45/14                                                                                 |
| B65H 75/24                                          | (51) B41M 1/04                                                          | B65H 45/28                                                                                 |
| (11) EP3412472                                      | B41M 7/00                                                               | (11) EP3566879                                                                             |
| (21) EP18171668.9                                   | C09D 11/00                                                              | (21) EP19173928.3                                                                          |
| (47) 07.07.2021                                     | C09D 11/101                                                             | (47) 07.07.2021                                                                            |
| (22) 09.05.2018                                     | C09D 11/38                                                              | (22) 10.05.2019                                                                            |
| (54) MEDIA REPLACEMENT PROCESS FOR THERMAL PRINTERS | (11) EP3445826                                                          | (54) AUTOMATED METHOD FOR DIGITAL MANUFACTURING OF STRUCTURES                              |
| (73) Datamax-O'Neil Corporation                     | (21) EP17718099.9                                                       | (73) C.P. Bourg S.A.                                                                       |
| (72) Ji, Yinting                                    | (47) 14.07.2021                                                         | (72) BOURG, Charles                                                                        |
| LIANG, Pu                                           | (87) EP2017059534                                                       | RENARD, Fabian                                                                             |
| (31) 201710333936                                   | 26.10.2017                                                              | (31) 201805311                                                                             |
| (32) 12.05.2017                                     | (22) 21.04.2017                                                         | (32) 11.05.2018                                                                            |
| (33) China                                          | (54) RADIATION CURABLE INK FORMULATION                                  | (33) Belgium                                                                               |
| (51) B41J 17/32                                     | (73) Flint Group Germany GmbH                                           | (51) B42D 15/00                                                                            |
| B41J 32/00                                          | (72) JOHANSSON, Anders                                                  | (11) EP2974877                                                                             |
| B41J 33/16                                          | SMITH, Dale                                                             | (21) EP15002086.5                                                                          |
| B41J 33/52                                          | GAVELIN, Patrik                                                         | (47) 07.07.2021                                                                            |
| B41J 35/28                                          | NIELSEN, Christian Benedikt Orea                                        | (22) 14.07.2015                                                                            |
| (11) EP3374190                                      | (31) 16166375                                                           | (54) METHOD OF MANUFACTURING A VALUABLE DOCUMENT WITH DIRECT VIEW/TRANSMISSION EFFECT      |
| (21) EP16865131.3                                   | (32) 21.04.2016                                                         | (73) Giesecke+Devrient Currency Technology GmbH                                            |
| (47) 07.07.2021                                     | (33) European Patent Office (EPO)                                       | (72) Schiffmann, Peter                                                                     |
| (87) US2016061632                                   | (51) B41M 7/00                                                          | Traub-Mayer, Christine                                                                     |
| 18.05.2017                                          | C08K 5/17                                                               | Kisselova, Jana                                                                            |
| (22) 11.11.2016                                     | D06P 5/30                                                               | (31) 102014010574                                                                          |
| (54) RIBBON SUPPLY MOUNTING                         | C09D 11/101                                                             | (32) 16.07.2014                                                                            |
| (73) Entrust Datacard Corporation                   | C09D 11/102                                                             | (33) Germany                                                                               |
| (72) PAULSON, Arthur, Joseph                        | C09D 11/38                                                              | (51) B42D 25/23                                                                            |
| KALTHOFF, James, Alan                               | (11) EP3334790                                                          | B42D 25/24                                                                                 |
| ZABOROWSKI, Alexander, Kelly                        | (21) EP16849375.7                                                       | B42D 25/26                                                                                 |
| HOEVE, Bryan, Dean                                  | (47) 14.07.2021                                                         | B42D 25/29                                                                                 |
| (31) 201562255107 P                                 | (87) US2016052048                                                       | B42D 25/324                                                                                |
| (32) 13.11.2015                                     | 30.03.2017                                                              | B42D 25/342                                                                                |
| (33) United States of America                       | (22) 16.09.2016                                                         | B42D 25/351                                                                                |
| (51) B41J 25/00                                     | (54) WATERBASED UV INKJET INK CONTAINING SYNTHETIC THICKENER            | B42D 25/373                                                                                |
| B41J 25/34                                          | (73) Sun Chemical Corporation                                           | B42D 25/425                                                                                |
| (11) EP3490805                                      | (72) HERLIHY, Shaun, Lawrence                                           | (11) EP3625059                                                                             |
| (21) EP17761563.0                                   | MAYERS, Sean Philip Francis                                             | (21) EP18726050.0                                                                          |
| (47) 07.07.2021                                     | (31) 201562222316 P                                                     | (47) 07.07.2021                                                                            |
| (87) IB2017000889                                   | (32) 23.09.2015                                                         | (87) EP2018000254                                                                          |
| 01.02.2018                                          | (33) United States of America                                           | 22.11.2018                                                                                 |
| (22) 31.07.2017                                     | (51) B41N 1/14                                                          | (22) 11.05.2018                                                                            |
| (54) DEVICE AND METHOD FOR ALIGNING PRINTHEADS      | B41N 3/00                                                               | (54) METHOD FOR SECURING A PARTIAL PRODUCT AND SYSTEM COMPRISING A SECURED PARTIAL PRODUCT |
| (73) Franck, Jan                                    | G03F 7/00                                                               | (73) Giesecke+Devrient Currency Technology GmbH                                            |
| (72) Franck, Jan                                    | G03F 7/004                                                              | (72) IMHOF, Martin                                                                         |
| (31) 202016004654 U                                 | G03F 7/09                                                               | FRANZ, Peter                                                                               |
| (32) 29.07.2016                                     | G03F 7/11                                                               | (31) 102017004682                                                                          |
| (33) Germany                                        | (11) EP3656576                                                          | (32) 16.05.2017                                                                            |
| (51) B41M 1/00                                      | (21) EP19214781.7                                                       | (33) Germany                                                                               |
| B41M 3/14                                           | (47) 14.07.2021                                                         | (51) B42D 25/30                                                                            |
| C09D 11/037                                         | (22) 26.01.2016                                                         | B42D 25/342                                                                                |
| C09D 11/50                                          | (54) LITHOGRAPHIC PRINTING PLATE PRECURSOR AND METHOD OF PRODUCING SAME | (11) EP3584090                                                                             |
| (11) EP3622026                                      | (73) FUJIFILM Corporation                                               |                                                                                            |
| (21) EP18724776.2                                   | (72) Wariishi, Koji                                                     |                                                                                            |
| (47) 07.07.2021                                     | (31) 2015015962                                                         |                                                                                            |
| (87) EP2018000241                                   |                                                                         |                                                                                            |
| 15.11.2018                                          |                                                                         |                                                                                            |

|                                                     |                                                                                                                                      |                                                                                                                   |
|-----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| (21) EP18753901.0                                   | 20.04.2017                                                                                                                           | (87) ES2017070732                                                                                                 |
| (47) 07.07.2021                                     | (22) 14.10.2016                                                                                                                      | 09.05.2019                                                                                                        |
| (87) CN2018075506                                   | (54) DECAL FOR PRODUCING A                                                                                                           | (22) 03.11.2017                                                                                                   |
| 23.08.2018                                          | DECORATION                                                                                                                           | (54) BEARING FOR SLIDING STRUCTURES                                                                               |
| (22) 07.02.2018                                     | (73) Ferro GmbH                                                                                                                      | (73) Iraundi, S.A.                                                                                                |
| (54) ANTI-COUNTERFEITING                            | (72) SCHULZ, Andreas                                                                                                                 | (72) AZKARATE URIBESALGO, Rafael                                                                                  |
| COMPONENT AND OPTICAL ANTI-COUNTERFEITING PRODUCT   | KHAN, Marya                                                                                                                          | (51) B60B 35/04                                                                                                   |
| (73) Zhongchao Special Security Technology Co., Ltd | POTH, Lutz                                                                                                                           | B60B 35/08                                                                                                        |
| China Banknote Printing and Minting Corp.           | SCHÄFER, Silke                                                                                                                       | F16F 7/02                                                                                                         |
| (72) ZHANG, Baoli                                   | TORSIELLO, Francesca                                                                                                                 | F16F 7/08                                                                                                         |
| SUN, Kai                                            | WENTZ, Florian                                                                                                                       | (11) EP3184323                                                                                                    |
| ZHU, Jun                                            | (31) 102015117711                                                                                                                    | (21) EP16205157.7                                                                                                 |
| WANG, Xiaoli                                        | (32) 16.10.2015                                                                                                                      | (47) 07.07.2021                                                                                                   |
| (31) 201710089613                                   | (33) Germany                                                                                                                         | (22) 19.12.2016                                                                                                   |
| (32) 20.02.2017                                     | (51) B44C 1/24                                                                                                                       | (54) BRAKE AXLE SLEEVE                                                                                            |
| (33) China                                          | B44C 5/04                                                                                                                            | (73) Goodrich Corporation                                                                                         |
| (51) B43K 24/08                                     | E04C 2/16                                                                                                                            | (72) ROOK, Todd                                                                                                   |
| B43K 25/02                                          | E04F 13/00                                                                                                                           | (31) 201514976161                                                                                                 |
| (11) EP3611030                                      | D04H 1/4218                                                                                                                          | (32) 21.12.2015                                                                                                   |
| (21) EP19191497.7                                   | (11) EP2881508                                                                                                                       | (33) United States of America                                                                                     |
| (47) 07.07.2021                                     | (21) EP14195374.5                                                                                                                    | (51) B60C 1/00                                                                                                    |
| (22) 13.08.2019                                     | (47) 14.07.2021                                                                                                                      | (11) EP3554850                                                                                                    |
| (54) WRITING DEVICE WITH EXTENDABLE CLIP ELEMENT    | (22) 28.11.2014                                                                                                                      | (21) EP17822393.9                                                                                                 |
| (73) SENATOR GmbH                                   | (54) A COATED MAT OF INORGANIC FIBRES, AND FUNCTIONAL DECORATIVE LAYERS, MANUFACTURED THEREFROM IN FLOOR, CEILING AND WALL COVERINGS | (47) 14.07.2021                                                                                                   |
| (72) Mack, Wolfgang                                 | (73) Johns Manville Europe GmbH                                                                                                      | (87) FR2017053474                                                                                                 |
| (31) 102018119761                                   | (72) KETZER, Michael                                                                                                                 | 28.06.2018                                                                                                        |
| (32) 14.08.2018                                     | GLEICH, Klaus Friedrich                                                                                                              | (22) 08.12.2017                                                                                                   |
| (33) Germany                                        | SCHNEIDER, Simone                                                                                                                    | (54) TREAD FOR A TIRE COMPRISING A MODIFIED ELASTOMER                                                             |
| (51) B43M 3/04                                      | (31) 102013020405                                                                                                                    | (73) Compagnie Générale des Etablissements Michelin                                                               |
| (11) EP3183125                                      | (32) 05.12.2013                                                                                                                      | (72) DE-LANDTSHEER, Stéphanie                                                                                     |
| (21) EP15752987.6                                   | (33) Germany                                                                                                                         | LEDOUX, Céline                                                                                                    |
| (47) 14.07.2021                                     | (51) B44C 5/04                                                                                                                       | (31) 1662774                                                                                                      |
| (87) EP2015068224                                   | (11) EP3738787                                                                                                                       | (32) 19.12.2016                                                                                                   |
| 25.02.2016                                          | (21) EP19174108.1                                                                                                                    | (33) France                                                                                                       |
| (22) 07.08.2015                                     | (47) 07.07.2021                                                                                                                      | (51) B60C 1/00                                                                                                    |
| (54) INSERTING SYSTEM                               | (22) 13.05.2019                                                                                                                      | C07C 211/54                                                                                                       |
| (73) Kern AG                                        | (54) METHOD FOR THE MANUFACTURE OF A WOODEN BOARD PROVIDED WITH A DECORATIVE LAYER                                                   | C07C 251/20                                                                                                       |
| (72) LEHMANN, Urs                                   | (73) Flooring Technologies Ltd.                                                                                                      | C08K 5/18                                                                                                         |
| (31) 12612014                                       | (72) Kalwa, Norbert                                                                                                                  | C10L 1/223                                                                                                        |
| (32) 22.08.2014                                     | (51) B60B 17/00                                                                                                                      | C10L 10/08                                                                                                        |
| (33) Switzerland                                    | (11) EP3429870                                                                                                                       | C10M 133/12                                                                                                       |
| (51) B44C 1/00                                      | (21) EP17711208.3                                                                                                                    | C10M 133/22                                                                                                       |
| B44C 1/20                                           | (47) 14.07.2021                                                                                                                      | (11) EP3634940                                                                                                    |
| B44C 3/02                                           | (87) EP2017056453                                                                                                                    | (21) EP18731571.8                                                                                                 |
| (11) EP2739486                                      | 21.09.2017                                                                                                                           | (47) 14.07.2021                                                                                                   |
| (21) EP12819558.3                                   | (22) 17.03.2017                                                                                                                      | (87) US2018033104                                                                                                 |
| (47) 07.07.2021                                     | (54) RAIL VEHICLE WHEEL AND CORRESPONDING PRODUCTION METHOD                                                                          | 13.12.2018                                                                                                        |
| (87) US2012048793                                   | (73) MG-Valdunes                                                                                                                     | (22) 17.05.2018                                                                                                   |
| 07.02.2013                                          | (72) DEMILLY, François                                                                                                               | (54) COMPOUNDS AND MIXTURES WITH ANTIDEGRADANT AND ANTIFATIGUE EFFICACY AND COMPOSITIONS INCLUDING SUCH COMPOUNDS |
| (22) 30.07.2012                                     | GHEWY, Franck                                                                                                                        | (73) Eastman Chemical Company                                                                                     |
| (54) GRAPHIC ARTICLE                                | INGOUF, Thierry                                                                                                                      | (72) BOONE, Matthew Allen                                                                                         |
| (73) 3M Innovative Properties Company               | (31) 1652275                                                                                                                         | FIELDS, Donald L., Jr.                                                                                            |
| (72) STEELMAN, Ronald, S.                           | (32) 17.03.2016                                                                                                                      | IGNATZ-HOOVER, Frederick                                                                                          |
| NIELSEN, John, A.                                   | (33) France                                                                                                                          | (31) 201715618301                                                                                                 |
| LYON, Keith R.                                      | (51) B60B 33/00                                                                                                                      | (32) 09.06.2017                                                                                                   |
| (31) 201161514313 P                                 | F16C 13/00                                                                                                                           | (33) United States of America                                                                                     |
| (32) 02.08.2011                                     | (11) EP3705743                                                                                                                       | (51) B60C 1/00                                                                                                    |
| (33) United States of America                       | (21) EP17821667.7                                                                                                                    | C08C 19/16                                                                                                        |
| (51) B44C 1/165                                     | (47) 07.07.2021                                                                                                                      | C08F 12/34                                                                                                        |
| C09C 1/62                                           |                                                                                                                                      | C08F 212/34                                                                                                       |
| (11) EP3344470                                      |                                                                                                                                      | C08K 3/04                                                                                                         |
| (21) EP16781788.1                                   |                                                                                                                                      | C08K 5/01                                                                                                         |
| (47) 07.07.2021                                     |                                                                                                                                      | C08L 9/06                                                                                                         |
| (87) EP2016074673                                   |                                                                                                                                      |                                                                                                                   |

|                                                                                                                |                                                                 |                                                     |
|----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------|
| C08L 25/02                                                                                                     | (54) RUBBER COMPOSITION COMPRISING A SPECIFIC HYDROCARBON RESIN | (72) COLOMBO, Gianfranco                            |
| (11) EP3555188                                                                                                 | (73) COMPAGNIE GENERALE DES ETABLISSEMENTS MICHELIN             | BOLZONI, Roberto                                    |
| (21) EP17884664.8                                                                                              | (72) DE GAUDEMARIS, Benoit                                      | BIZZI, Stefano                                      |
| (47) 14.07.2021                                                                                                | BELZ, Justin                                                    | LORENZETTI, Daniele                                 |
| (87) US2017067209                                                                                              | (31) 1753289                                                    | (31) RM20130422                                     |
| 28.06.2018                                                                                                     | (32) 14.04.2017                                                 | (32) 16.07.2013                                     |
| (22) 19.12.2017                                                                                                | (33) France                                                     | (33) Italy                                          |
| (54) TIRES COMPRISING POLYINDANE RESINS AND USES THEREOF                                                       | (51) B60C 3/04                                                  | (51) B60C 11/00                                     |
| (73) Eastman Chemical Company                                                                                  | B60C 9/02                                                       | B60C 11/03                                          |
| (72) INGRATTA, Mark, William                                                                                   | B60C 9/18                                                       | (11) EP3616943                                      |
| BASU, Soumendra, Kumar                                                                                         | B60C 13/00                                                      | (21) EP19204479.0                                   |
| PAVLIN, Mark, Stanley                                                                                          | B60C 15/02                                                      | (47) 07.07.2021                                     |
| DELOACH, Joseph, Alexander                                                                                     | B60C 15/024                                                     | (22) 16.07.2014                                     |
| KUTSEK, George, Joseph                                                                                         | B60C 19/00                                                      | (54) CAR TYRE                                       |
| CHENG, Wei, Min                                                                                                | (11) EP3707016                                                  | (73) Pirelli Tyre S.p.A.                            |
| (31) 201662436094 P                                                                                            | (21) EP18808445.3                                               | (72) COLOMBO, Gianfranco                            |
| 201715845182                                                                                                   | (47) 14.07.2021                                                 | BOLZONI, Roberto                                    |
| (32) 19.12.2016                                                                                                | (87) FR2018052711                                               | BIZZI, Stefano                                      |
| 18.12.2017                                                                                                     | 16.05.2019                                                      | LORENZETTI, Daniele                                 |
| (33) United States of America                                                                                  | (22) 05.11.2018                                                 | (31) RM20130422                                     |
| United States of America                                                                                       | (54) TYRE FOR PASSENGER VEHICLE                                 | (32) 16.07.2013                                     |
| (51) B60C 1/00                                                                                                 | (73) Compagnie Générale des Etablissements Michelin             | (33) Italy                                          |
| C08F 212/12                                                                                                    | (72) MORIVAL, Sylvain                                           | (51) B60C 11/00                                     |
| C08F 297/04                                                                                                    | (31) 1760434                                                    | B60C 11/03                                          |
| (11) EP3394128                                                                                                 | (32) 07.11.2017                                                 | B60C 11/13                                          |
| (21) EP16819993.3                                                                                              | (33) France                                                     | (11) EP3521062                                      |
| (47) 14.07.2021                                                                                                | (51) B60C 9/18                                                  | (21) EP17856178.3                                   |
| (87) FR2016053275                                                                                              | B60C 9/20                                                       | (47) 14.07.2021                                     |
| 29.06.2017                                                                                                     | B60C 9/22                                                       | (87) JP2017034867                                   |
| (22) 08.12.2016                                                                                                | B60C 9/30                                                       | 05.04.2018                                          |
| (54) METHOD FOR SYNTHESIZING A THERMOPLASTIC ELASTOMER COMPRISING AT LEAST ONE POLY(ALPHA-METHYLSTYRENE) BLOCK | B60C 11/03                                                      | (22) 27.09.2017                                     |
| (73) Compagnie Générale des Etablissements Michelin                                                            | (11) EP3599110                                                  | (54) TIRE TREAD AND TIRE HAVING THIS TREAD          |
| (72) MATMOUR, Rachid                                                                                           | (21) EP17903603.3                                               | (73) Compagnie Générale des Etablissements Michelin |
| NGO, Robert                                                                                                    | (47) 14.07.2021                                                 | (72) UCHIDA, Tomotake                               |
| (31) 1562986                                                                                                   | (87) JP2017046259                                               | MAESAKA, Masayuki                                   |
| (32) 21.12.2015                                                                                                | 04.10.2018                                                      | (31) PCT/JP2016/078461                              |
| (33) France                                                                                                    | (22) 22.12.2017                                                 | (32) 27.09.2016                                     |
| (51) B60C 1/00                                                                                                 | (54) PNEUMATIC TIRE                                             | (33) World Intellectual Property Office (WIPO)      |
| C08K 5/17                                                                                                      | (73) Bridgestone Corporation                                    | (51) B60C 11/03                                     |
| C08K 5/20                                                                                                      | (72) KUWAYAMA, Isao                                             | B60C 11/04                                          |
| C08L 21/00                                                                                                     | (31) 2017069105                                                 | B60C 11/12                                          |
| (11) EP2098564                                                                                                 | (32) 30.03.2017                                                 | (11) EP3693187                                      |
| (21) EP09152755.6                                                                                              | (33) Japan                                                      | (21) EP20154312.1                                   |
| (47) 07.07.2021                                                                                                | (51) B60C 9/20                                                  | (47) 07.07.2021                                     |
| (22) 13.02.2009                                                                                                | B60C 9/28                                                       | (22) 29.01.2020                                     |
| (54) Natural rubber composition and tyres made from same                                                       | (11) EP3385095                                                  | (54) TIRE                                           |
| (73) Continental Reifen Deutschland GmbH                                                                       | (21) EP18163145.8                                               | (73) Sumitomo Rubber Industries, Ltd.               |
| (72) Wagemann, Jürgen                                                                                          | (47) 14.07.2021                                                 | (72) KANEMATSU, Yoshiaki                            |
| Weinreich, Hajo                                                                                                | (22) 21.03.2018                                                 | HORIGUCHI, Toshiki                                  |
| (31) 102008013265                                                                                              | (54) ULTRA SUPER SINGLE TIRE FOR HEAVY DUTY                     | (31) 2019019052                                     |
| (32) 08.03.2008                                                                                                | (73) Hankook Tire Co., Ltd.                                     | (32) 05.02.2019                                     |
| (33) Germany                                                                                                   | (72) Lee, Dong gyu                                              | (33) Japan                                          |
| (51) B60C 1/00                                                                                                 | Bae, Sung ryul                                                  | (51) B60C 11/03                                     |
| C08L 9/00                                                                                                      | (31) 20170043868                                                | B60C 11/13                                          |
| C08L 9/06                                                                                                      | (32) 04.04.2017                                                 | (11) EP3533624                                      |
| (11) EP3609723                                                                                                 | (33) Korea (Republic)                                           | (21) EP17865354.9                                   |
| (21) EP18721090.1                                                                                              | (51) B60C 11/00                                                 | (47) 07.07.2021                                     |
| (47) 07.07.2021                                                                                                | B60C 11/03                                                      | (87) JP2017035825                                   |
| (87) FR2018050938                                                                                              | (11) EP3616944                                                  | 03.05.2018                                          |
| 18.10.2018                                                                                                     | (21) EP19204496.4                                               | (22) 02.10.2017                                     |
| (22) 13.04.2018                                                                                                | (47) 07.07.2021                                                 | (54) PNEUMATIC TIRE                                 |
|                                                                                                                | (22) 16.07.2014                                                 | (73) The Yokohama Rubber Co., Ltd.                  |
|                                                                                                                | (54) CAR TYRE                                                   | (72) TAMURA, Masashi                                |
|                                                                                                                | (73) Pirelli Tyre S.p.A.                                        | (31) 2016209787                                     |
|                                                                                                                |                                                                 | (32) 26.10.2016                                     |

|                                          |                                           |                                           |
|------------------------------------------|-------------------------------------------|-------------------------------------------|
| (33) Japan                               | G06K 19/077                               | (51) B60C 23/04                           |
| (51) B60C 11/12                          | H01Q 1/22                                 | B60C 23/20                                |
| (11) EP3658392                           | (11) EP3634783                            | (11) EP3498503                            |
| (21) EP18724795.2                        | (21) EP18714458.9                         | (21) EP18211213.6                         |
| (47) 07.07.2021                          | (47) 14.07.2021                           | (47) 07.07.2021                           |
| (87) EP2018061256                        | (87) EP2018056622                         | (22) 10.12.2018                           |
| 31.01.2019                               | 13.12.2018                                | (54) TYRE PRESSURE MONITORING             |
| (22) 03.05.2018                          | (22) 16.03.2018                           | UNIT WITH EXPANDABLE PROGRAM              |
| (54) TREAD PROFILE OF A VEHICLE TIRE     | (54) VEHICLE TYRE                         | LIBRARY AND METHOD FOR                    |
| (73) Continental Reifen Deutschland GmbH | (73) Continental Reifen Deutschland GmbH  | EXPANDING A PROGRAM LIBRARY               |
| (72) BERGER, Christoph                   | (72) KURZ, Martin                         | OF A TYRE PRESSURE MONITORING             |
| BAUER, Claudia                           | DIETRICH, Holger                          | UNIT                                      |
| (31) 102017212710                        | EHMKE, Tobias                             | (73) Huf Baolong Electronics Bretten GmbH |
| (32) 25.07.2017                          | MOHR, Daniel                              | (72) Wagner, Markus                       |
| (33) Germany                             | WENCKEL, Mathias                          | Vögeli, Patrick                           |
| (51) B60C 11/13                          | BRÖKER, Benjamin                          | Brand, Peter                              |
| (11) EP3455090                           | (31) 102017209545                         | (31) 102017130295                         |
| (21) EP17723333.5                        | (32) 07.06.2017                           | (32) 18.12.2017                           |
| (47) 07.07.2021                          | (33) Germany                              | (33) Germany                              |
| (87) EP2017061079                        | (51) B60C 23/00                           | (51) B60C 23/04                           |
| 16.11.2017                               | B60C 23/04                                | H02J 50/12                                |
| (22) 09.05.2017                          | (11) EP3421270                            | (11) EP3363659                            |
| (54) PNEUMATIC TIRE                      | (21) EP18180417.0                         | (21) EP18153385.2                         |
| (73) Apollo Tyres Global R&D B.V.        | (47) 14.07.2021                           | (47) 07.07.2021                           |
| (72) WOULDSTRA, Ydwer Rinske             | (22) 28.06.2018                           | (22) 25.01.2018                           |
| WIJNANT, Ysbrand Hans                    | (54) PRESSURE MEASURING DEVICE            | (54) SYSTEMS AND METHODS FOR              |
| BEKKE, Dirk Anton                        | (73) SRAM, LLC.                           | VARIABLE GAP WIRELESS POWER               |
| (31) 201608284                           | (72) Jordan, Brian                        | AND COMMUNICATION                         |
| (32) 11.05.2016                          | Krugman, Trevor                           | (73) Goodrich Corporation                 |
| (33) United Kingdom                      | Nichols, Geoff                            | (72) PLANT, Albert Keith                  |
| (51) B60C 11/16                          | Rothschild, Benjamin                      | KORDIK, Michael                           |
| (11) EP3672813                           | Huft, David Jonathan                      | (31) 201715426855                         |
| (21) EP18725781.1                        | (31) 201715635974                         | (32) 07.02.2017                           |
| (47) 07.07.2021                          | 201815954229                              | (33) United States of America             |
| (87) EP2018061758                        | (32) 28.06.2017                           | (51) B60C 23/12                           |
| 28.02.2019                               | 16.04.2018                                | (11) EP3248815                            |
| (22) 08.05.2018                          | (33) United States of America             | (21) EP17162053.7                         |
| (54) SPIKE FOR ANCHORING IN A SPIKE      | United States of America                  | (47) 14.07.2021                           |
| HOLE OF A TREAD STRIP OF A               | (51) B60C 23/04                           | (22) 05.08.2015                           |
| PNEUMATIC TIRE AND PNEUMATIQUE           | (11) EP3083292                            | (54) VALVE STEM LOCATED CONTROL           |
| TIRE WITH SUCH SPIKES                    | (21) EP14821570.0                         | REGULATOR FOR AN AIR                      |
| (73) Continental Reifen Deutschland GmbH | (47) 07.07.2021                           | MAINTENANCE TIRE                          |
| (72) SCHLITTENHARD, Jan                  | (87) EP2014077914                         | (73) The Goodyear Tire & Rubber Company   |
| KÖTTER, Maik                             | 25.06.2015                                | (72) LIN, Cheng-Hsiung                    |
| SPECHTMEYER, Torben                      | (22) 16.12.2014                           | (31) 201414457388                         |
| (31) 102017214868                        | (54) METHOD AND DEVICE FOR                | (32) 12.08.2014                           |
| (32) 24.08.2017                          | OPERATING A TYRE PRESSURE                 | (33) United States of America             |
| (33) Germany                             | MONITORING DEVICE                         | (51) B60C 23/12                           |
| (51) B60C 13/00                          | (73) Huf Baolong Electronics Bretten GmbH | (11) EP3501861                            |
| (11) EP3592577                           | (72) SEIFERT, Andre                       | (21) EP18212732.4                         |
| (21) EP18709315.8                        | MÜLLER, Benjamin                          | (47) 14.07.2021                           |
| (47) 14.07.2021                          | WAGNER, Markus                            | (22) 14.12.2018                           |
| (87) EP2018055005                        | SANDROCK, Karsten                         | (54) PUMP ASSEMBLY                        |
| 13.09.2018                               | BRAND, Peter                              | (73) The Goodyear Tire & Rubber Company   |
| (22) 01.03.2018                          | (31) 102013114726                         | (72) LIN, Cheng-Hsiung                    |
| (54) TYRE PROVIDED WITH A TEXTURE        | (32) 20.12.2013                           | (31) 201762607412 P                       |
| ON A SIDEWALL                            | (33) Germany                              | (32) 19.12.2017                           |
| (73) COMPAGNIE GENERALE DES              | (51) B60C 23/04                           | (33) United States of America             |
| ETABLISSEMENTS MICHELIN                  | (11) EP3715151                            | (51) B60C 23/12                           |
| (72) DEBORDEAUX, Héloïse                 | (21) EP19397508.3                         | F04B 45/04                                |
| MUHLHOFF, Olivier                        | (47) 14.07.2021                           | F04B 45/047                               |
| NOMURA, Masayoshi                        | (22) 29.03.2019                           | (11) EP3498502                            |
| (31) 1751786                             | (54) A TIRE                               | (21) EP18212048.5                         |
| (32) 06.03.2017                          | (73) Nokian Renkaat Oyj                   | (47) 14.07.2021                           |
| (33) France                              | (72) SOINI, Teemu                         | (22) 12.12.2018                           |
| (51) B60C 19/00                          | RÄISÄNEN, Jani                            | (54) PUMP ASSEMBLY AND WHEEL              |
| B60C 23/04                               | ANTIKAINEN, Atte                          | ASSEMBLY                                  |
|                                          | OJALA, Jari                               | (73) The Goodyear Tire & Rubber Company   |

|                                       |                                          |                                    |
|---------------------------------------|------------------------------------------|------------------------------------|
| (72) LIN, Cheng-Hsiung                | (47) 14.07.2021                          | (72) Redeker, Michael              |
| (31) 201715845208                     | (22) 10.05.2019                          | (31) 102017223331                  |
| (32) 18.12.2017                       | (54) LATCH ASSEMBLY FOR RAISING          | (32) 20.12.2017                    |
| (33) United States of America         | AND LOWERING THE HEIGHT OF A             | (33) Germany                       |
| (51) B60D 5/00                        | VEHICLE                                  | (51) B60G 17/015                   |
| B61D 17/22                            | (73) BeijingWest Industries Co. Ltd.     | B60G 17/017                        |
| (11) EP3290287                        | (72) SZYMANSKI, Jerzy Piotr              | (11) EP3145737                     |
| (21) EP16001884.2                     | (31) 201862674612 P                      | (21) EP14727162.1                  |
| (47) 07.07.2021                       | 201916384504                             | (47) 07.07.2021                    |
| (22) 29.08.2016                       | (32) 22.05.2018                          | (87) EP2014001377                  |
| (54) CORNER PANEL MEMBRANE FOR        | 15.04.2019                               | 26.11.2015                         |
| A BELLOWS MEMBRANE FOR A              | (33) United States of America            | (22) 22.05.2014                    |
| GANGWAY, BELLOWS MEMBRANE             | United States of America                 | (54) METHOD FOR LEVEL CONTROL      |
| FOR A GANGWAY AND GANGWAY             | (51) B60G 11/26                          | OF A MOTOR VEHICLE WITH AIR        |
| (73) Dellner Couplers AB              | B60G 11/27                               | SUSPENSION                         |
| (72) SMITH, Graham                    | B60G 11/30                               | (73) ZF CV Systems Hannover GmbH   |
| (51) B60G 7/00                        | B60G 17/052                              | (72) ALBERS, Jürgen                |
| (11) EP3498504                        | F16F 9/04                                | BARTEL, Siegfried                  |
| (21) EP17207594.7                     | (11) EP2981423                           | GOCZ, Reinhard                     |
| (47) 14.07.2021                       | (21) EP14780176.5                        | JOVERS, Ingo                       |
| (22) 15.12.2017                       | (47) 14.07.2021                          | LENTZ, Uwe                         |
| (54) SUSPENSION ARM FOR A WHEEL       | (87) US2014032450                        | (51) B60G 17/016                   |
| SUSPENSION OF A MOTOR VEHICLE         | 09.10.2014                               | B60G 17/08                         |
| (73) Autotech Engineering Deutschland | (22) 01.04.2014                          | B62K 25/06                         |
| GmbH                                  | (54) VEHICLE SUSPENSION SYSTEM           | F16F 9/19                          |
| (72) Kreisig, Ralf                    | WITH RESERVOIR FOR AIR SPRING            | F16F 9/50                          |
| Leimkühler, Leslie                    | DAMPING                                  | B62J 27/00                         |
| (51) B60G 7/02                        | (73) Watson & Chalin Manufacturing, Inc. | B62J 99/00                         |
| B60G 9/00                             | Hendrickson USA, L.L.C.                  | (11) EP3431376                     |
| B60G 11/10                            | (72) DELORENZIS, Damon                   | (21) EP17766372.1                  |
| (11) EP3458290                        | (31) 201313855788                        | (47) 07.07.2021                    |
| (21) EP17713612.4                     | (32) 03.04.2013                          | (87) JP2017008158                  |
| (47) 07.07.2021                       | (33) United States of America            | 21.09.2017                         |
| (87) EP2017056947                     | (51) B60G 11/27                          | (22) 01.03.2017                    |
| 23.11.2017                            | H02P 1/18                                | (54) DAMPER CONTROL DEVICE, AND    |
| (22) 23.03.2017                       | H02P 7/29                                | SUSPENSION DEVICE                  |
| (54) HOLDING MOUNT                    | (11) EP3304724                           | (73) KYB Corporation               |
| (73) SAF-HOLLAND GmbH                 | (21) EP16725034.9                        | (72) AWANO, Koichiro               |
| (72) GALAZIN, Gregory                 | (47) 07.07.2021                          | (31) 2016053223                    |
| HAMMER, Edward                        | (87) EP2016000824                        | (32) 17.03.2016                    |
| (31) 102016109184                     | 08.12.2016                               | (33) Japan                         |
| (32) 19.05.2016                       | (22) 18.05.2016                          | (51) B60G 17/018                   |
| (33) Germany                          | (54) COMPRESSOR FOR GENERATING           | B60G 17/08                         |
| (51) B60G 9/00                        | COMPRESSED AIR, COMPRESSED               | (11) EP3318432                     |
| B60G 9/02                             | AIR SUPPLY SYSTEM, PNEUMATIC             | (21) EP17197228.4                  |
| (11) EP3694731                        | SYSTEM, AND METHOD FOR                   | (47) 07.07.2021                    |
| (21) EP18799839.8                     | OPERATING A COMPRESSOR                   | (22) 19.10.2017                    |
| (47) 14.07.2021                       | (73) ZF CV Systems Hannover GmbH         | (54) DAMPING FORCE CONTROL         |
| (87) IB2018057844                     | (72) ABDELFAATTAH, Mohamed               | APPARATUS FOR SUSPENSION           |
| 18.04.2019                            | BLEIL, Reiner                            | (73) AISIN SEIKI KABUSHIKI KAISHA  |
| (22) 10.10.2018                       | SOHN, Robert                             | (72) YAMAMOTO, Akihito             |
| (54) SUSPENSION ASSEMBLY FOR A        | (31) 102015006711                        | TANAKA, Wataru                     |
| VEHICLE AXLE                          | (32) 29.05.2015                          | (31) 2016208866                    |
| (73) CARRARO S.p.A.                   | (33) Germany                             | (32) 25.10.2016                    |
| (72) SPAZIO, Andrea                   | (51) B60G 17/00                          | (33) Japan                         |
| (31) 201700113851                     | B60W 30/00                               | (51) B60G 17/052                   |
| (32) 10.10.2017                       | B60W 50/00                               | B60G 17/056                        |
| (33) Italy                            | B62D 6/00                                | (11) EP3335917                     |
| (51) B60G 11/16                       | G08C 15/00                               | (21) EP17207070.8                  |
| B60G 15/06                            | H04L 12/40                               | (47) 07.07.2021                    |
| B60G 17/005                           | B60W 30/02                               | (22) 13.12.2017                    |
| B60G 17/015                           | (11) EP3505415                           | (54) AIR SPRING DEVICE FOR A MOTOR |
| B60G 17/02                            | (21) EP18211537.8                        | VEHICLE                            |
| F16H 25/20                            | (47) 14.07.2021                          | (73) Gudzulic, Miro                |
| F16H 25/22                            | (22) 11.12.2018                          | (72) Gudzulic, Miro                |
| (11) EP3594029                        | (54) CONTROL OF A RUNNING GEAR           | (31) 102016124253                  |
| (21) EP19173773.3                     | COMPONENT OF A VEHICLE                   | (32) 13.12.2016                    |
|                                       | (73) AUDI AG                             |                                    |

|                                       |                                     |                                          |
|---------------------------------------|-------------------------------------|------------------------------------------|
| (33) Germany                          | (33) Germany                        | (72) GRAF, Philip                        |
| (51) B60G 17/052                      | (51) B60H 1/00                      | (31) 102016207912                        |
| B62D 33/06                            | B60H 1/22                           | (32) 09.05.2016                          |
| B62D 33/10                            | (11) EP2858842                      | (33) Germany                             |
| F16F 9/05                             | (21) EP13731044.7                   | (51) B60H 1/00                           |
| F16F 9/43                             | (47) 07.07.2021                     | F02D 41/06                               |
| B60G 99/00                            | (87) EP2013061860                   | F02D 41/24                               |
| (11) EP3572687                        | 12.12.2013                          | F02M 31/125                              |
| (21) EP19176471.1                     | (22) 07.06.2013                     | F02M 37/22                               |
| (47) 07.07.2021                       | (54) EQUIPMENT FOR CONTROLLING THE  | F02M 37/30                               |
| (22) 24.05.2019                       | TEMPERATURE OF A PASSENGER          | (11) EP2489864                           |
| (54) AIR SPRING FOR CONTROLLING THE   | COMPARTMENT OF A VEHICLE, IN        | (21) EP11425036.8                        |
| LEVEL OF A DRIVER'S CAB OR OF A       | PARTICULAR AN ELECTRIC VEHICLE      | (47) 14.07.2021                          |
| MOTOR VEHICLE                         | (73) Valeo Systemes Thermiques      | (22) 18.02.2011                          |
| (73) Vibracoustic CV Air Springs GmbH | (72) MARTINELL, Amanda              | (54) DIESEL FUEL INJECTION SYSTEM IN     |
| (72) WEBER, Michael                   | AILLOUD, Fabrice                    | A MOTOR VEHICLE PROVIDED WITH            |
| (31) 102018112627                     | LOUP, Didier                        | A DIESEL ENGINE                          |
| (32) 25.05.2018                       | VINCENT, Philippe                   | (73) Fiat Group Automobiles S.p.A.       |
| (33) Germany                          | (31) 1255401                        | (72) Sergi, Marco                        |
| (51) B60G 17/06                       | (32) 08.06.2012                     | Ciardulli, Martino                       |
| G01M 17/04                            | (33) France                         | Zenzon, Renato                           |
| (11) EP2136195                        | (51) B60H 1/00                      | Zaccagni, Sergio                         |
| (21) EP09161193.9                     | B60H 1/24                           | (51) B60H 1/00                           |
| (47) 07.07.2021                       | B60H 1/26                           | G08G 1/0967                              |
| (22) 27.05.2009                       | (11) EP3539805                      | (11) EP3680116                           |
| (54) Method and device for testing an | (21) EP18162273.9                   | (21) EP19215691.7                        |
| installed shock absorber of a motor   | (47) 14.07.2021                     | (47) 07.07.2021                          |
| vehicle                               | (22) 16.03.2018                     | (22) 12.12.2019                          |
| (73) Beissbarth GmbH                  | (54) ROOF SYSTEM FOR A VEHICLE      | (54) VENTILATION CONTROL SYSTEM,         |
| (72) Nobis, Guenter                   | (73) Inalfa Roof Systems Group B.V. | VENTILATION CONTROL PROGRAM,             |
| Wegener, Daniel                       | (72) Geurts, Ruud                   | AND METHOD FOR CONTROLLING               |
| Abraham, Steffen                      | Nellen, Marcel Johan Christiaan     | VENTILATION CONTROL SYSTEM               |
| (31) 102008002484                     | (51) B60H 1/00                      | (73) Toyota Jidosha Kabushiki Kaisha     |
| (32) 17.06.2008                       | B60H 1/32                           | (72) HOSHINO, Yu                         |
| (33) Germany                          | H01M 10/617                         | JINNO, Kunihiro                          |
| (51) B60H 1/00                        | H01M 10/625                         | (31) 2019002361                          |
| (11) EP3693196                        | H01M 10/63                          | (32) 10.01.2019                          |
| (21) EP20153588.7                     | H01M 10/663                         | (33) Japan                               |
| (47) 07.07.2021                       | (11) EP3599117                      | (51) B60H 1/32                           |
| (22) 24.01.2020                       | (21) EP19188101.0                   | F25B 49/02                               |
| (54) VEHICLE-USE AIR CONDITIONING     | (47) 14.07.2021                     | (11) EP3414499                           |
| DEVICE                                | (22) 24.07.2019                     | (21) EP17706035.7                        |
| (73) Valeo Japan Co., Ltd.            | (54) VEHICLE THERMAL MANAGEMENT     | (47) 07.07.2021                          |
| (72) NAGANO, Hideki                   | SYSTEM AND VEHICLE THERMAL          | (87) US2017015977                        |
| YOSHIZAKI, Hisayoshi                  | MANAGEMENT METHOD                   | 17.08.2017                               |
| HAYASHI, Naoto                        | (73) NIO (Anhui) Holding Co., Ltd.  | (22) 01.02.2017                          |
| (31) 2019018989                       | (72) YUAN, Ye                       | (54) POWER MANAGEMENT FOR CO2            |
| (32) 05.02.2019                       | WANG, Feng                          | TRANSPORTATION REFRIGERATION             |
| (33) Japan                            | XIAO, Yao                           | SYSTEM                                   |
| (51) B60H 1/00                        | ZHANG, Jieying                      | (73) Carrier Corporation                 |
| B60H 1/04                             | WANG, Yanbo                         | (72) SUN, Jian                           |
| F28D 1/053                            | GU, Zhuanyao                        | (31) 201662293407 P                      |
| F28D 21/00                            | (31) 201810825538                   | (32) 10.02.2016                          |
| (11) EP3713784                        | (32) 25.07.2018                     | (33) United States of America            |
| (21) EP18810919.3                     | (33) China                          | (51) B60J 1/00                           |
| (47) 07.07.2021                       | (51) B60H 1/00                      | B60J 1/02                                |
| (87) EP2018081384                     | B60L 1/04                           | B60R 11/02                               |
| 31.05.2019                            | B60L 1/06                           | C03C 27/12                               |
| (22) 15.11.2018                       | F16H 57/04                          | (11) EP3489053                           |
| (54) TEMPERATURE-CONTROL DEVICE OF    | (11) EP3455098                      | (21) EP17830971.2                        |
| AN INTERIOR OR COMPONENTS OF A        | (21) EP17721385.7                   | (47) 14.07.2021                          |
| MOTOR VEHICLE                         | (47) 14.07.2021                     | (87) JP2017025820                        |
| (73) Volkswagen AG                    | (87) EP2017060709                   | 25.01.2018                               |
| (72) ALBRECHT, Jan-Christoph          | 16.11.2017                          | (22) 14.07.2017                          |
| WACHSMUTH, Carsten                    | (22) 04.05.2017                     | (54) WINDSHIELD                          |
| ENGLER, Frank, Jürgen                 | (54) METHOD FOR OPERATING A MOTOR   | (73) Nippon Sheet Glass Company, Limited |
| (31) 102017127697                     | VEHICLE, AND MOTOR VEHICLE          | (72) OYA, Kazuaki                        |
| (32) 23.11.2017                       | (73) Audi AG                        | TERANISHI, Toyoyuki                      |



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|-----------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------|
| KONDO, Fumiyoshi                                    | E05B 81/66                                                                    | (11) EP3630516                                                    |
| KAWAZU, Mitsuhiro                                   | E05B 81/68                                                                    | (21) EP18733930.4                                                 |
| KAMITANI, Kazutaka                                  | (11) EP3450660                                                                | (47) 07.07.2021                                                   |
| SHIMOKAWA, Yohei                                    | (21) EP16900362.1                                                             | (87) FR2018000128                                                 |
| (31) 2016142468                                     | (47) 07.07.2021                                                               | 29.11.2018                                                        |
| (32) 20.07.2016                                     | (87) JP2016062948                                                             | (22) 18.05.2018                                                   |
| (33) Japan                                          | 02.11.2017                                                                    | (54) MOTOR VEHICLE PROVIDED WITH A PROTECTIVE COVERING SYSTEM     |
| (51) B60J 1/00                                      | (22) 25.04.2016                                                               | (73) ACPV                                                         |
| B60J 5/10                                           | (54) DOOR CLOSING DEVICE                                                      | (72) SASSI, André                                                 |
| (11) EP3549804                                      | (73) Mitsui Kinzoku ACT Corporation                                           | SASSI, Jocelyne                                                   |
| (21) EP19166843.3                                   | (72) NAGAOKA, Tomoharu                                                        | (31) 1754530                                                      |
| (47) 14.07.2021                                     | NOZAWA, Hideaki                                                               | (32) 22.05.2017                                                   |
| (22) 02.04.2019                                     | (51) B60J 5/06                                                                | (33) France                                                       |
| (54) OPTIMISED STRUCTURAL PANEL MOUNTS FOR TAILGATE | B60J 7/16                                                                     | (51) B60K 1/00                                                    |
| (73) Compagnie Plastic Omnium                       | (11) EP3275710                                                                | B60K 7/00                                                         |
| (72) STRUSS, Martin                                 | (21) EP16181669.9                                                             | B60K 17/04                                                        |
| COUDRON, Philippe                                   | (47) 07.07.2021                                                               | (11) EP3683078                                                    |
| (31) 1852907                                        | (22) 28.07.2016                                                               | (21) EP20151208.4                                                 |
| (32) 04.04.2018                                     | (54) JOINT WITH SLIDE                                                         | (47) 07.07.2021                                                   |
| (33) France                                         | (73) Schmitz Cargobull AG                                                     | (22) 10.01.2020                                                   |
| (51) B60J 1/00                                      | (72) Schouwink, Christian                                                     | (54) CONTROL SYSTEM TO ELIMINATE POWERTRAIN BACKLASH              |
| B60K 35/00                                          | Hornig, Stefan                                                                | (73) Atieva, Inc.                                                 |
| F21V 8/00                                           | (51) B60J 7/043                                                               | (72) Gauthier, Jean-Philippe                                      |
| G02B 27/01                                          | B60J 10/82                                                                    | (31) 201916250122                                                 |
| B60W 50/14                                          | (11) EP3665025                                                                | (32) 17.01.2019                                                   |
| (11) EP3657234                                      | (21) EP18750388.3                                                             | (33) United States of America                                     |
| (21) EP19216763.3                                   | (47) 07.07.2021                                                               | (51) B60K 1/02                                                    |
| (47) 14.07.2021                                     | (87) EP2018070731                                                             | B60W 10/08                                                        |
| (22) 27.04.2017                                     | 14.02.2019                                                                    | B60W 10/26                                                        |
| (54) VEHICLE WINDOW PLATE                           | (22) 31.07.2018                                                               | B60W 50/00                                                        |
| (73) AGC INC.                                       | (54) ROOF ARRANGEMENT FOR A VEHICLE ROOF AND VEHICLE ROOF WITH A ROOF OPENING | H01M 10/44                                                        |
| (72) NOMURA, Daisuke                                | (73) Webasto SE                                                               | B60K 6/26                                                         |
| SADAKANE, Shunsuke                                  | (72) FRANK, Matthias                                                          | B60K 6/442                                                        |
| (31) 2016089865                                     | SCHÄUFLER, Stefan                                                             | B60K 6/48                                                         |
| (32) 27.04.2016                                     | ZUNZER, Andreas Josef                                                         | B60K 6/485                                                        |
| (33) Japan                                          | WENZEL, Reinhard                                                              | B60W 30/184                                                       |
| (51) B60J 1/10                                      | (31) 102017118397                                                             | B60W 20/00                                                        |
| B60J 1/18                                           | (32) 11.08.2017                                                               | B60W 20/13                                                        |
| B60J 5/04                                           | (33) Germany                                                                  | B60L 53/24                                                        |
| B60J 5/10                                           | (51) B60J 7/08                                                                | B60L 58/12                                                        |
| (11) EP2998140                                      | (11) EP3533643                                                                | (11) EP2985171                                                    |
| (21) EP15185319.9                                   | (21) EP19159728.5                                                             | (21) EP14200471.2                                                 |
| (47) 07.07.2021                                     | (47) 14.07.2021                                                               | (47) 07.07.2021                                                   |
| (22) 15.09.2015                                     | (22) 27.02.2019                                                               | (22) 29.12.2014                                                   |
| (54) VEHICLE BODY STRUCTURE                         | (54) TARPAULIN RETRACTION AND EXTENSION DEVICE                                | (54) Forced charging method for phev vehicles using motor and hsg |
| (73) TOYOTA JIDOSHA KABUSHIKI KAISHA                | (73) Fabrication Elcarg Inc.                                                  | (73) Hyundai Motor Company                                        |
| (72) KAMIMURA, Shinya                               | (72) Royer, Real                                                              | (72) Lim, Jae Sang                                                |
| AYUKAWA, Tatsuya                                    | Boutin, Keven                                                                 | Kang, Gu Bae                                                      |
| (31) 2014188279                                     | (31) 2996958                                                                  | Kim, Young Un                                                     |
| (32) 16.09.2014                                     | (32) 01.03.2018                                                               | Youn, Kil Young                                                   |
| (33) Japan                                          | (33) Canada                                                                   | Roh, Jeong Won                                                    |
| (51) B60J 3/02                                      | (51) B60J 7/16                                                                | Cha, Ji Wan                                                       |
| (11) EP3581414                                      | B60P 3/34                                                                     | Kim, Jin Ho                                                       |
| (21) EP19188843.7                                   | (11) EP3446905                                                                | Lim, Seong Yeop                                                   |
| (47) 14.07.2021                                     | (21) EP18189621.8                                                             | (31) 20140104143                                                  |
| (22) 16.12.2016                                     | (47) 14.07.2021                                                               | (32) 12.08.2014                                                   |
| (54) SUN VISOR ASSEMBLY                             | (22) 17.08.2018                                                               | (33) Korea (Republic)                                             |
| (73) Motus Integrated Technologies                  | (54) ERECTABLE VEHICLE ROOF                                                   | (51) B60K 1/04                                                    |
| (72) Welter, Patrick                                | (73) REIMO Reisemobil-Center GmbH                                             | H01M 50/20                                                        |
| (31) 201562268335 P                                 | (72) Hoffmann, Ralf                                                           | (11) EP3616247                                                    |
| (32) 16.12.2015                                     | (31) 102017119302                                                             | (21) EP18718758.8                                                 |
| (33) United States of America                       | (32) 23.08.2017                                                               | (47) 14.07.2021                                                   |
| (51) B60J 5/00                                      | (33) Germany                                                                  | (87) EP2018059147                                                 |
| E05B 53/00                                          | (51) B60J 11/02                                                               | 01.11.2018                                                        |
| E05B 79/08                                          |                                                                               | (22) 10.04.2018                                                   |
| E05B 81/20                                          |                                                                               |                                                                   |

|                                        |                                   |                                    |
|----------------------------------------|-----------------------------------|------------------------------------|
| (54) BATTERY ASSEMBLY                  | (54) ASSEMBLY OF A FUEL TUBE AND  | 06.12.2018                         |
| (73) MAHLE International GmbH          | LIQUID AGENT TUBE FASTENED        | (22) 10.05.2018                    |
| (72) HIRSCH, Stefan                    | TOGETHER                          | (54) FILLING HEAD FOR A FUEL TANK, |
| MOSER, Michael                         | (73) PSA Automobiles SA           | PARTICULARLY OF A VEHICLE          |
| SCHROTH, Holger                        | (72) LE GUYADER, Gael             | (73) Illinois Tool Works Inc.      |
| WALLISCH, Mario                        | (31) 1757787                      | (72) LE TINNIER, Christophe        |
| (31) 102017206988                      | (32) 22.08.2017                   | BAR, Jean-Philippe                 |
| (32) 26.04.2017                        | (33) France                       | (31) 1754680                       |
| (33) Germany                           | (51) B60K 15/03                   | (32) 29.05.2017                    |
| (51) B60K 7/00                         | B60K 15/077                       | (33) France                        |
| F16H 1/06                              | (11) EP3083312                    | (51) B60K 17/28                    |
| B60K 6/40                              | (21) EP14811889.6                 | B60K 25/00                         |
| B60K 6/405                             | (47) 07.07.2021                   | F16H 55/14                         |
| B60K 6/46                              | (87) EP2014077495                 | F16H 57/00                         |
| F16H 57/04                             | 25.06.2015                        | (11) EP2954229                     |
| B60L 50/16                             | (22) 12.12.2014                   | (21) EP14749640.0                  |
| (11) EP3296133                         | (54) FUEL COLLECTING DEVICE FOR A | (47) 07.07.2021                    |
| (21) EP16792438.0                      | FUEL TANK OF A MOTOR VEHICLE      | (87) US2014015242                  |
| (47) 14.07.2021                        | (73) Vitesco Technologies GmbH    | 14.08.2014                         |
| (87) JP2016059898                      | Bayerische Motoren Werke          | (22) 07.02.2014                    |
| 17.11.2016                             | Aktiengesellschaft                | (54) POWER TAKE-OFF HAVING REDUCED |
| (22) 28.03.2016                        | (72) GERHARDT, Marc               | GEAR NOISE                         |
| (54) POWER TRANSMITTING DEVICE AND     | WELLHÄUSER, Markus                | (73) Parker-Hannifin Corporation   |
| POWER OUTPUTTING DEVICE WITH           | SCHNEIDER, Tobias                 | (72) MCPHERSON, Robert             |
| SAME                                   | HEIMER, Toni                      | FRIEND, Greg                       |
| (73) Aichi Machine Industry Co., Ltd.  | MENZL, Peter                      | BURRELL, John, William             |
| (72) NAKADERA, Hiroyuki                | (31) 102013226295                 | (31) 201361762382 P                |
| NAKASHIMA, Takayuki                    | (32) 17.12.2013                   | (32) 08.02.2013                    |
| SATO, Kazuhiko                         | (33) Germany                      | (33) United States of America      |
| AOYAMA, Hideki                         | (51) B60K 15/035                  | (51) B60K 17/36                    |
| KOKUBO, Akira                          | B60R 16/08                        | B60K 23/08                         |
| KONDO, Hiromasa                        | B62D 33/067                       | (11) EP3608143                     |
| SATO, Motohiko                         | (11) EP3509889                    | (21) EP19173363.3                  |
| (31) 2015098619                        | (21) EP17849197.3                 | (47) 07.07.2021                    |
| (32) 13.05.2015                        | (47) 07.07.2021                   | (22) 08.05.2019                    |
| (33) Japan                             | (87) SE2017050812                 | (54) DRIVE AXLE SYSTEM HAVING      |
| (51) B60K 13/02                        | 15.03.2018                        | A PLANETARY INTERAXLE              |
| B60K 15/063                            | (22) 11.08.2017                   | DIFFERENTIAL UNIT                  |
| B60K 15/067                            | (54) AN ARRANGEMENT FOR MOUNTING  | (73) ArvinMeritor Technology, LLC  |
| B62J 35/00                             | A BOIL-OFF PIPE OF A LIQUEFIED    | (72) ESCHENBURG, Dale              |
| F02M 35/02                             | GAS FUEL SYSTEM TO A VEHICLE      | HAYES, Brian                       |
| F02M 35/024                            | (73) Scania CV AB                 | MARTIN, Robert                     |
| F02M 35/04                             | (72) LINDBERG, Jonas              | LEICHT, Phillip                    |
| F02M 35/10                             | (31) 1651210                      | GARCIA, Pedro                      |
| F02M 35/16                             | (32) 09.09.2016                   | KEENEY, Christopher                |
| F02M 37/00                             | (33) Sweden                       | (31) 201816059226                  |
| (11) EP3578796                         | (51) B60K 15/035                  | (32) 09.08.2018                    |
| (21) EP19170421.2                      | B62D 33/07                        | (33) United States of America      |
| (47) 14.07.2021                        | (11) EP3509886                    | (51) B60K 20/02                    |
| (22) 19.04.2019                        | (21) EP17849194.0                 | F16H 59/02                         |
| (54) SADDLE-RIDING VEHICLE             | (47) 07.07.2021                   | F16H 59/04                         |
| (73) Kawasaki Jukogyo Kabushiki Kaisha | (87) SE2017050809                 | F16H 61/24                         |
| (72) AKAKI, Hiroyuki                   | 15.03.2018                        | F16H 63/42                         |
| ICHI, Satoaki                          | (22) 11.08.2017                   | (11) EP3499093                     |
| (31) 2018109286                        | (54) AN ARRANGEMENT FOR MOUNTING  | (21) EP17838334.5                  |
| (32) 07.06.2018                        | A BOIL-OFF PIPE OF A LIQUEFIED    | (47) 07.07.2021                    |
| (33) Japan                             | GAS FUEL SYSTEM TO A VEHICLE      | (87) CN2017076982                  |
| (51) B60K 13/04                        | (73) Scania CV AB                 | 15.02.2018                         |
| B60K 15/01                             | (72) LINDBERG, Jonas              | (22) 16.03.2017                    |
| B60K 15/04                             | PASIC, Anel                       | (54) GEARSHIFT CONTROL MECHANISM,  |
| F16B 21/09                             | (31) 1651207                      | AUTOMOBILE, AND GEAR CONTROL       |
| (11) EP3672822                         | (32) 09.09.2016                   | METHOD                             |
| (21) EP18752586.0                      | (33) Sweden                       | (73) Beiqi Foton Motor Co., Ltd.   |
| (47) 14.07.2021                        | (51) B60K 15/04                   | (72) CHU, Chao                     |
| (87) FR2018051829                      | (11) EP3630520                    | LIU, Jinbao                        |
| 28.02.2019                             | (21) EP18725380.2                 | YUE, Yanliang                      |
| (22) 18.07.2018                        | (47) 07.07.2021                   | YOU, Tingqin                       |
|                                        | (87) US2018031985                 | (31) 201610644823                  |

|                                      |                                   |                                       |
|--------------------------------------|-----------------------------------|---------------------------------------|
| (32) 08.08.2016                      | LEE, Jaeho                        | G01C 21/36                            |
| (33) China                           | CHOI, Sunghwan                    | (11) EP3358305                        |
| (51) B60K 25/00                      | JUNG, Dukyung                     | (21) EP15905365.1                     |
| B60K 25/02                           | (31) 20160113358                  | (47) 07.07.2021                       |
| B60L 1/00                            | (32) 02.09.2016                   | (87) JP2015077667                     |
| B60W 10/02                           | (33) Korea (Republic)             | 06.04.2017                            |
| B60W 10/30                           | (51) B60K 35/00                   | (22) 30.09.2015                       |
| F16H 61/00                           | B60K 37/06                        | (54) VEHICULAR DISPLAY DEVICE         |
| B60K 6/48                            | (11) EP3501874                    | (73) Nissan Motor Co., Ltd.           |
| B60K 6/547                           | (21) EP18214828.8                 | (72) MARUYAMA, Kenji                  |
| B60W 20/00                           | (47) 07.07.2021                   | WATANABE, Hiroshi                     |
| B60L 50/16                           | (22) 20.12.2018                   | SHISHIDO, Masayuki                    |
| (11) EP2890597                       | (54) GESTURE CONTROL METHOD       | KOSAKA, Norio                         |
| (21) EP13833353.9                    | AND DEVICE FOR AT LEAST ONE       | (51) B60K 35/00                       |
| (47) 07.07.2021                      | FUNCTION OF A VEHICLE             | G02B 27/01                            |
| (87) US2013057181                    | (73) Seat, S.A.                   | G02F 1/1335                           |
| 06.03.2014                           | (72) REGUEIRO ESTEVEZ, Borja      | G02F 1/13357                          |
| (22) 29.08.2013                      | GABARRO MORENTE, Xavier           | (11) EP3451047                        |
| (54) INTEGRATED HYDRAULIC SUPPLY     | MOLINA MARTINEZ, Daniel           | (21) EP17789559.6                     |
| PUMP                                 | GARCIA PAMPLONA, Antonio          | (47) 07.07.2021                       |
| (73) BAE Systems Controls Inc.       | (31) 201731436                    | (87) JP2017016429                     |
| (72) SCHULTE, Jurgen                 | (32) 20.12.2017                   | 02.11.2017                            |
| MUGGEO, Filippo                      | (33) Spain                        | (22) 25.04.2017                       |
| MATTHEWS, Derek                      | (51) B60K 35/00                   | (54) DISPLAY APPARATUS AND            |
| PANCHERI, Brendan                    | B60K 37/06                        | VEHICULAR HEAD-UP DISPLAY             |
| (31) 201213601947                    | G06F 16/29                        | (73) Kyocera Corporation              |
| (32) 31.08.2012                      | (11) EP3074265                    | (72) KUSAFUKA, Kaoru                  |
| (33) United States of America        | (21) EP14805519.7                 | HAYASHI, Yusuke                       |
| (51) B60K 25/02                      | (47) 14.07.2021                   | KAWAJI, Satoshi                       |
| B60W 10/06                           | (87) EP2014075222                 | (31) 2016088149                       |
| B60W 10/08                           | 28.05.2015                        | (32) 26.04.2016                       |
| B60W 10/30                           | (22) 21.11.2014                   | (33) Japan                            |
| E02F 9/20                            | (54) SYSTEM-WIDE SEARCH IN DRIVER | (51) B60K 35/00                       |
| E02F 9/22                            | INFORMATION SYSTEMS               | G06F 3/0482                           |
| F04B 17/05                           | (73) Bayerische Motoren Werke     | (11) EP2292458                        |
| F04B 49/20                           | Aktiengesellschaft                | (21) EP10008658.6                     |
| B60K 6/46                            | (72) GRAF, Stefan                 | (47) 07.07.2021                       |
| B60K 6/485                           | MEULAPING FEYOU, Dimitri          | (22) 19.08.2010                       |
| B60W 30/188                          | REISCHL, Verena                   | (54) Method and device for displaying |
| B60W 20/11                           | VALDIVIA, Bianca                  | information                           |
| B60W 50/08                           | (31) 102013223972                 | (73) Volkswagen Aktiengesellschaft    |
| (11) EP3294581                       | (32) 25.11.2013                   | (72) Hentschel, Jenika                |
| (21) EP15891992.8                    | (33) Germany                      | Missall, Markus                       |
| (47) 07.07.2021                      | (51) B60K 35/00                   | Grote, Gerald                         |
| (87) SE2015050542                    | B60W 30/14                        | Kuhn, Mathias                         |
| 17.11.2016                           | G02B 27/01                        | Geissler, Jens                        |
| (22) 13.05.2015                      | (11) EP3543059                    | Burghoff, Christian                   |
| (54) A WORKING MACHINE ARRANGED      | (21) EP19157312.0                 | (31) 102009040257                     |
| WITH MEANS TO DRIVE AND              | (47) 14.07.2021                   | (32) 04.09.2009                       |
| CONTROL A HYDRAULIC PUMP             | (22) 14.02.2019                   | (33) Germany                          |
| (73) Volvo Construction Equipment AB | (54) METHOD FOR CALCULATING       | (51) B60K 37/06                       |
| (72) VIGHOLM, Bo                     | THE INSERTION OF ADDITIONAL       | B66F 9/075                            |
| EKVALL, Andreas                      | INFORMATION FOR DISPLAY ON        | (11) EP3147151                        |
| (51) B60K 35/00                      | A DISPLAY UNIT, DEVICE FOR        | (21) EP16190015.4                     |
| B60K 37/02                           | CARRYING OUT THE METHOD,          | (47) 14.07.2021                       |
| B60W 40/02                           | MOTOR VEHICLE AND COMPUTER        | (22) 21.09.2016                       |
| G01C 21/36                           | PROGRAM                           | (54) A SYSTEM AND PROCESS FOR         |
| B60W 50/14                           | (73) VOLKSWAGEN                   | DISPLAYING INFORMATION FROM A         |
| (11) EP3507125                       | AKTIENGESELLSCHAFT                | MOBILE COMPUTER IN A VEHICLE          |
| (21) EP17847023.3                    | (72) Kleen, Andro                 | (73) Hand Held Products, Inc.         |
| (47) 14.07.2021                      | Wesseling, Anne-Marie             | (72) VENTRESS, B. Frank, JR           |
| (87) KR2017009554                    | Wyszka, Robert Jan                | (31) 201514865286                     |
| 08.03.2018                           | Haar, Adrian                      | (32) 25.09.2015                       |
| (22) 31.08.2017                      | (31) 102018204254                 | (33) United States of America         |
| (54) VEHICLE USER INTERFACE          | (32) 20.03.2018                   | (51) B60K 37/06                       |
| APPARATUS AND VEHICLE                | (33) Germany                      | G02B 27/01                            |
| (73) LG Electronics Inc.             | (51) B60K 35/00                   | (11) EP3680121                        |
| (72) KIM, Ilwan                      | G01C 21/26                        | (21) EP19217507.3                     |

|                                                                         |                                                                                              |                                                                                                                  |
|-------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| (47) 14.07.2021                                                         | B60L 3/00                                                                                    | (51) B60L 7/12                                                                                                   |
| (22) 18.12.2019                                                         | B60L 53/53                                                                                   | H04L 9/32                                                                                                        |
| (54) CIRCUIT DEVICE, ELECTRONIC APPARATUS, AND MOBILE BODY              | (11) EP34444915                                                                              | B62M 6/90                                                                                                        |
| (73) Seiko Epson Corporation                                            | (21) EP16898618.0                                                                            | B60R 25/045                                                                                                      |
| (72) Anandabairavasamy, Anand Kumar                                     | (47) 07.07.2021                                                                              | B60R 25/30                                                                                                       |
| Wittmeir, Manfred                                                       | (87) JP2016061933                                                                            | (11) EP3565743                                                                                                   |
| Jeffrey, Eric                                                           | 19.10.2017                                                                                   | (21) EP17847707.1                                                                                                |
| Kawamoto, Tetsuo                                                        | (22) 13.04.2016                                                                              | (47) 14.07.2021                                                                                                  |
| Akiba, Yasutoshi                                                        | (54) BATTERY MODULE                                                                          | (87) EP2017084727                                                                                                |
| (31) 201862782657 P                                                     | (73) Kabushiki Kaisha Toshiba                                                                | 12.07.2018                                                                                                       |
| 2019117587                                                              | Toshiba Infrastructure Systems & Solutions Corporation                                       | (22) 28.12.2017                                                                                                  |
| (32) 20.12.2018                                                         | (72) SENOUE, Kiyoshi                                                                         | (54) PROTECTION SYSTEM AND METHOD FOR ELECTRIC BICYCLES                                                          |
| 25.06.2019                                                              | (51) B60L 3/06                                                                               | (73) myStromer AG                                                                                                |
| (33) United States of America                                           | B60L 13/00                                                                                   | (72) ISENSCHMID, Dominic                                                                                         |
| Japan                                                                   | (11) EP2459411                                                                               | WIEDMER, Christophe                                                                                              |
| (51) B60K 37/06                                                         | (21) EP10742893.0                                                                            | EGLI, Peter                                                                                                      |
| H03K 17/98                                                              | (47) 07.07.2021                                                                              | (31) 182017                                                                                                      |
| G06F 3/0482                                                             | (87) IB2010053143                                                                            | (32) 06.01.2017                                                                                                  |
| (11) EP2939861                                                          | 03.02.2011                                                                                   | (33) Switzerland                                                                                                 |
| (21) EP15000118.8                                                       | (22) 09.07.2010                                                                              | (51) B60L 7/24                                                                                                   |
| (47) 14.07.2021                                                         | (54) TORQUE CONTROL SYSTEM                                                                   | B60L 15/20                                                                                                       |
| (22) 17.01.2015                                                         | (73) Protean Electric Limited                                                                | B60R 21/00                                                                                                       |
| (54) Operating system for a vehicle, in particular a commercial vehicle | (72) ANGELL, Steve                                                                           | B60T 8/17                                                                                                        |
| (73) MAN Truck & Bus SE                                                 | MARTIN, Timothy John                                                                         | B60T 8/172                                                                                                       |
| (72) Schopka, Martin                                                    | (31) 0913169                                                                                 | G08G 1/16                                                                                                        |
| Arnold, Claus                                                           | (32) 29.07.2009                                                                              | B60K 6/46                                                                                                        |
| Güllich, Johannes                                                       | (33) United Kingdom                                                                          | B60W 10/18                                                                                                       |
| Mohra, Holger                                                           | (51) B60L 3/12                                                                               | B60W 20/00                                                                                                       |
| Kupitza, Rudolf                                                         | H01M 10/42                                                                                   | B60W 20/14                                                                                                       |
| Zimmermann, Andreas                                                     | H02J 7/00                                                                                    | (11) EP3514001                                                                                                   |
| (31) 102014004538                                                       | B60L 58/10                                                                                   | (21) EP17850891.7                                                                                                |
| (32) 31.03.2014                                                         | G01R 31/36                                                                                   | (47) 14.07.2021                                                                                                  |
| (33) Germany                                                            | (11) EP3096431                                                                               | (87) JP2017032928                                                                                                |
| (51) B60L 3/04                                                          | (21) EP15752022.2                                                                            | 22.03.2018                                                                                                       |
| G01R 31/00                                                              | (47) 14.07.2021                                                                              | (22) 12.09.2017                                                                                                  |
| G01R 31/327                                                             | (87) KR2015001767                                                                            | (54) ELECTRICALLY-DRIVEN MINING VEHICLE AND BRAKE OPERATION GUIDING METHOD IN ELECTRICALLY-DRIVEN MINING VEHICLE |
| H01H 47/00                                                              | 27.08.2015                                                                                   | (73) Hitachi Construction Machinery Co., Ltd.                                                                    |
| H02H 3/16                                                               | (22) 24.02.2015                                                                              | (72) TAKEDA Koei                                                                                                 |
| H02H 7/00                                                               | (54) BATTERY MANAGEMENT UNIT AND METHOD FOR SETTING IDENTIFIER BY USING FREQUENCY MODULATION | UOTSU Shinichi                                                                                                   |
| B60L 3/00                                                               | (73) LG Chem, Ltd.                                                                           | (31) 2016179845                                                                                                  |
| B60L 50/50                                                              | (72) PARK, Jong-Min                                                                          | (32) 14.09.2016                                                                                                  |
| B60L 53/14                                                              | HEO, Jin-Seok                                                                                | (33) Japan                                                                                                       |
| B60L 53/31                                                              | (31) 20140021282                                                                             | (51) B60L 7/26                                                                                                   |
| G01R 31/50                                                              | (32) 24.02.2014                                                                              | B60L 15/20                                                                                                       |
| G01R 31/52                                                              | (33) Korea (Republic)                                                                        | (11) EP3305582                                                                                                   |
| (11) EP2897242                                                          | (51) B60L 7/00                                                                               | (21) EP15893304.4                                                                                                |
| (21) EP13837841.9                                                       | B60L 7/02                                                                                    | (47) 14.07.2021                                                                                                  |
| (47) 07.07.2021                                                         | B60L 7/22                                                                                    | (87) JP2015065144                                                                                                |
| (87) JP2013005360                                                       | B60W 10/00                                                                                   | 01.12.2016                                                                                                       |
| 20.03.2014                                                              | H01C 1/08                                                                                    | (22) 26.05.2015                                                                                                  |
| (22) 11.09.2013                                                         | B60W 30/18                                                                                   | (54) CONTROL DEVICE FOR ELECTRIC MOTOR VEHICLE AND CONTROL METHOD FOR ELECTRIC MOTOR VEHICLE                     |
| (54) DEVICE FOR DETECTING WELDING OF RELAY                              | (11) EP3395605                                                                               | (73) Nissan Motor Co., Ltd.                                                                                      |
| (73) Panasonic Intellectual Property Management Co., Ltd.               | (21) EP18156610.0                                                                            | (72) SAWADA, Akira                                                                                               |
| (72) MOCHIZUKI, Kento                                                   | (47) 07.07.2021                                                                              | ITOU, Ken                                                                                                        |
| TAZAKI, Shintaro                                                        | (22) 14.02.2018                                                                              | NAKAJIMA, Takashi                                                                                                |
| (31) 2012201415                                                         | (54) VEHICLE AND BRAKE RESISTANCE FOR A VEHICLE                                              | KATSUMATA, Yuji                                                                                                  |
| (32) 13.09.2012                                                         | (73) Siemens Mobility GmbH                                                                   | KOMATSU, Hiroyuki                                                                                                |
| (33) Japan                                                              | (72) Amler, Dr. Gerald                                                                       | (51) B60L 7/26                                                                                                   |
| (51) B60L 3/04                                                          | Karipidis, Dr. Claus-Ulrich                                                                  | B60T 8/00                                                                                                        |
| H01M 10/44                                                              | Otto, Marcus                                                                                 | B60W 10/08                                                                                                       |
| H02J 1/08                                                               | Rüter, Dr. Arnd                                                                              | B60W 10/26                                                                                                       |
| H02J 1/10                                                               | (31) 102017207274                                                                            |                                                                                                                  |
| H02J 7/00                                                               | (32) 28.04.2017                                                                              |                                                                                                                  |
| H02J 9/06                                                               | (33) Germany                                                                                 |                                                                                                                  |

|                                    |                                |                                               |
|------------------------------------|--------------------------------|-----------------------------------------------|
| B60W 10/188                        | (51) B60L 15/00                | TRAVELABLE DISTANCE                           |
| B60W 30/18                         | B60L 15/20                     | CALCULATION METHOD FOR                        |
| B60W 20/15                         | H02M 3/158                     | VEHICLE                                       |
| B60L 3/00                          | B60K 6/445                     | (73) Toyota Jidosha Kabushiki Kaisha          |
| (11) EP3712002                     | B60W 20/20                     | (72) KATANODA, Tomoya                         |
| (21) EP19177752.3                  | B60L 50/16                     | (31) 2016146656                               |
| (47) 14.07.2021                    | B60L 50/61                     | (32) 26.07.2016                               |
| (22) 31.05.2019                    | (11) EP3474432                 | (33) Japan                                    |
| (54) MANAGEMENT OF THE CLEANING OF | (21) EP18201828.3              | (51) B60L 50/10                               |
| FRICTION BODIES OF AUTOMOTIVE      | (47) 14.07.2021                | (11) EP2779413                                |
| BRAKING SYSTEMS                    | (22) 22.10.2018                | (21) EP14160034.6                             |
| (73) FCA Italy S.p.A.              | (54) DRIVE DEVICE              | (47) 07.07.2021                               |
| (72) BONACCORSO, Gabriele          | (73) DENSO CORPORATION         | (22) 14.03.2014                               |
| ENRICO, Luca                       | (72) OI, Shohei                | (54) Drive system and method for driving a    |
| BADINO, Renato                     | (31) 2017204311                | vehicle                                       |
| IELUZZI, Michele                   | (32) 23.10.2017                | (73) General Electric Company                 |
| GALBUSERA, Michele                 | (33) Japan                     | (72) Zhou, Ronghui                            |
| (31) 19164119                      | (51) B60L 15/00                | Kang, Pengju                                  |
| (32) 20.03.2019                    | B60R 16/00                     | Shen, Xiangming                               |
| (33) European Patent Office (EPO)  | B60S 5/00                      | Lu, Xi                                        |
| (51) B60L 9/24                     | G01M 17/00                     | Li, Fei                                       |
| (11) EP3353008                     | G07C 5/08                      | Zhou, Jian                                    |
| (21) EP16766987.8                  | H04L 29/08                     | Qiu, Hai                                      |
| (47) 14.07.2021                    | H04W 4/44                      | Sun, Fengcheng                                |
| (87) EP2016072264                  | G01R 31/36                     | (31) 201310084413                             |
| 30.03.2017                         | (11) EP3559625                 | (32) 15.03.2013                               |
| (22) 20.09.2016                    | (21) EP17883626.8              | (33) China                                    |
| (54) INDUCTIVELY TRANSFERRING      | (47) 14.07.2021                | (51) B60L 50/52                               |
| ELECTRIC ENERGY TO A VEHICLE       | (87) CA2017051573              | B60L 58/12                                    |
| USING CONSECUTIVE SEGMENTS         | 28.06.2018                     | (11) EP2902243                                |
| WHICH ARE OPERATED AT THE SAME     | (22) 21.12.2017                | (21) EP15152305.7                             |
| TIME                               | (54) DEVICE AND METHOD FOR     | (47) 07.07.2021                               |
| (73) Bombardier Primove GmbH       | MANAGING AN ELECTRIC VEHICLE   | (22) 23.01.2015                               |
| (72) WIRTH, Christian              | (73) GEOTAB Inc.               | (54) Method and device for displaying vehicle |
| (31) 201516702                     | (72) MENDES, Christopher J.    | parameters                                    |
| (32) 21.09.2015                    | KOCH, Alexander K.             | (73) Volkswagen Aktiengesellschaft            |
| (33) United Kingdom                | GIANNIKOURIS, Michael          | (72) Kassner, Astrid                          |
| (51) B60L 13/03                    | (31) 201662438192 P            | Joachim, Manuel                               |
| B60L 15/00                         | (32) 22.12.2016                | Mischke, Michael                              |
| B65G 54/02                         | (33) United States of America  | (31) 102014201863                             |
| H02K 41/02                         | (51) B60L 15/02                | (32) 03.02.2014                               |
| H02P 25/06                         | H02P 29/024                    | (33) Germany                                  |
| (11) EP3457559                     | B60L 3/00                      | (51) B60L 50/62                               |
| (21) EP18193080.1                  | (11) EP2862270                 | (11) EP2931551                                |
| (47) 14.07.2021                    | (21) EP13747502.6              | (21) EP13821706.2                             |
| (22) 07.09.2018                    | (47) 14.07.2021                | (47) 14.07.2021                               |
| (54) METHOD AND SYSTEM TO          | (87) IB2013054782              | (87) GB2013053281                             |
| CHARACTERIZE LOADS IN A LINEAR     | 27.12.2013                     | 19.06.2014                                    |
| SYNCHRONOUS MOTOR SYSTEM           | (22) 11.06.2013                | (22) 12.12.2013                               |
| (73) MagneMotion, Inc.             | (54) A METHOD AND CONTROL UNIT | (54) RANGE EXTENDER CONTROL                   |
| (72) HUANG, Yuhong                 | FOR AN ELECTRIC MOTOR OR       | (73) Tevva Motors Limited                     |
| (31) 201715702983                  | GENERATOR                      | (72) BENNETT, Asher                           |
| (32) 13.09.2017                    | (73) Protean Electric Limited  | BENNETT, Moria                                |
| (33) United States of America      | (72) Burke, Richard            | HANKINSON, John                               |
| (51) B60L 13/04                    | (31) 201210799                 | POWELL, Malcolm                               |
| (11) EP3471996                     | (32) 18.06.2012                | POWER, Trevor                                 |
| (21) EP17731638.7                  | (33) United Kingdom            | WATSON, Robert                                |
| (47) 07.07.2021                    | (51) B60L 15/20                | ZHU, Zhengye                                  |
| (87) IB2017052588                  | G01C 21/00                     | (31) 201261736050 P                           |
| 21.12.2017                         | G01C 21/26                     | (32) 12.12.2012                               |
| (22) 04.05.2017                    | G01C 21/34                     | (33) United States of America                 |
| (54) MAGNETIC SUSPENSION FOR A     | G01C 21/36                     | (51) B60L 53/00                               |
| VEHICLE                            | (11) EP3276305                 | (11) EP3227133                                |
| (73) Ironbox S.r.L.                | (21) EP17182866.8              | (21) EP15864447.6                             |
| (72) GIROTTO, Adriano              | (47) 07.07.2021                | (47) 07.07.2021                               |
| (31) UA20164396                    | (22) 24.07.2017                | (87) AU2015050767                             |
| (32) 15.06.2016                    | (54) TRAVELABLE DISTANCE       | 09.06.2016                                    |
| (33) Italy                         | CALCULATION SYSTEM AND         | (22) 04.12.2015                               |

|                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) AN APPARATUS AND SYSTEM FOR PROVIDING A SECONDARY POWER SOURCE FOR AN ELECTRIC VEHICLE                                                                                                                                                                                                                                                                                     | Stahl, Tobias<br>(31) 102019102102<br>(32) 29.01.2019<br>(33) Germany                                                                                                                                                                                                                                                                                                                                                                                                                                                               | (87) US2018048132<br>07.03.2019<br>(22) 27.08.2018                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| (73) Rayner, Dignan Herbert<br>(72) RAYNER, Ivan Herbert Godfrey<br>(31) 2014904968<br>(32) 04.12.2014<br>(33) Australia                                                                                                                                                                                                                                                        | (51) B60N 2/02<br>B60N 2/07<br>B60N 3/00<br>B60R 16/027<br>(11) EP3625082<br>(21) EP18725475.0<br>(47) 07.07.2021<br>(87) EP2018062662<br>22.11.2018<br>(22) 16.05.2018<br>(54) VEHICLE DEVICE SYSTEM<br>(73) Volkswagen Aktiengesellschaft<br>(72) BORK, Simon<br>ALISCH, Sebastian<br>(31) 102017208446<br>(32) 18.05.2017<br>(33) Germany                                                                                                                                                                                        | (54) AUTOMOTIVE VEHICLE WITH EXPANDABLE UNDERSEAT STORAGE COMPARTMENT<br>(73) FCA US LLC<br>(72) NEAG, Dorinel<br>LONG, Jeffery E.<br>NEIGHBORS, Kyle<br>SUDER, Jimmy L.<br>COLLINS, Stuart E.<br>SCHENTEN, Steven J.<br>(31) 201715689537<br>(32) 29.08.2017<br>(33) United States of America                                                                                                                                                                                                |
| (51) B60L 53/30<br>B60L 53/66<br>(11) EP3626514<br>(21) EP19197325.4<br>(47) 07.07.2021<br>(22) 13.09.2019<br>(54) CHARGING STATION<br>(73) Innogy SE<br>(72) Dembek, Florian<br>Vogel, Gerald<br>(31) 102018123129<br>(32) 20.09.2018<br>(33) Germany                                                                                                                          | (51) B60N 2/02<br>B60R 11/00<br>B60R 11/02<br>B64D 11/00<br>B64D 11/06<br>(11) EP2572408<br>(21) EP11784060.3<br>(47) 07.07.2021<br>(87) US2011036741<br>24.11.2011<br>(22) 17.05.2011<br>(54) AIRLINE PASSENGER SEAT MODULAR USER INTERFACE DEVICE<br>(73) Thales Avionics, Inc.<br>Phitek Systems Limited<br>(72) MONDRAGON, Christopher, K.<br>GREIG, Nigel<br>SCHOLTEN, Edward<br>MOODY, Roy<br>SIMMONDS, Paul<br>CLARKE, Elaine<br>DARBONNE, Thomas Allen<br>(31) 345286 P<br>(32) 17.05.2010<br>(33) United States of America | (51) B60N 2/56<br>G05D 23/19<br>(11) EP3557366<br>(21) EP19168363.0<br>(47) 07.07.2021<br>(22) 10.04.2019<br>(54) METHOD FOR THE AUTOMATIC CONTROL OF A HEATING SYSTEM, AND ASSOCIATED SYSTEM<br>(73) Seat, S.A.<br>(72) DÍEZ DEL COTILLO, ALBERTO<br>CCORIMANYA BECERRA, Hernan<br>MORENO SAAVEDRA, Tania<br>FARELL ROCA, Mariona<br>GARCÍA MALDONADO, Sergio<br>TENA ROCA, Marc<br>CATALÁN ECHAVE, Iñigo<br>DE LA GALA FERNÁNDEZ, Marcos<br>(31) 201830386<br>(32) 20.04.2018<br>(33) Spain |
| (51) B60L 53/62<br>(11) EP3253610<br>(21) EP16702063.5<br>(47) 07.07.2021<br>(87) EP2016051551<br>11.08.2016<br>(22) 26.01.2016<br>(54) METHOD AND SYSTEM FOR GENERATING A CHARGING SCHEDULE FOR AN ELECTRIC STORAGE IN A VEHICLE<br>(73) Volkswagen Aktiengesellschaft<br>(72) BREUEL, Matthias<br>REINSCHLÜSSEL, Anke<br>(31) 102015201897<br>(32) 04.02.2015<br>(33) Germany | (51) B60M 1/00<br>B60M 1/22<br>H01B 1/02<br>H01B 5/10<br>(11) EP3400601<br>(21) EP16820477.4<br>(47) 07.07.2021<br>(87) US2016066152<br>15.06.2017<br>(22) 12.12.2016<br>(54) MESSENGER WIRES FOR ELECTRIC TRAINS<br>(73) CTC Global Corporation<br>Lamifil NV<br>(72) BOSZE, Eric<br>HERMANS, Peter<br>(31) 201562266360 P<br>(32) 11.12.2015<br>(33) United States of America                                                                                                                                                     | (51) B60N 2/66<br>F04B 35/04<br>F04B 49/06<br>F04B 53/10<br>B60N 2/90<br>(11) EP3660306<br>(21) EP20150765.4<br>(47) 07.07.2021<br>(22) 27.11.2017<br>(54) INTEGRATED PUMP VALVE DEVICE FOR PROVIDING PRESSURIZED AIR<br>(73) FICO CABLES LDA<br>(72) DE CASTRO FARIA, Manuel António<br>LOPES, Pedro                                                                                                                                                                                         |
| (51) B60M 1/00<br>B60M 1/22<br>H01B 1/02<br>H01B 5/10<br>(11) EP3400601<br>(21) EP16820477.4<br>(47) 07.07.2021<br>(87) US2016066152<br>15.06.2017<br>(22) 12.12.2016<br>(54) MESSENGER WIRES FOR ELECTRIC TRAINS<br>(73) CTC Global Corporation<br>Lamifil NV<br>(72) BOSZE, Eric<br>HERMANS, Peter<br>(31) 201562266360 P<br>(32) 11.12.2015<br>(33) United States of America | (51) B60N 2/06<br>B60N 2/14<br>B60N 2/34<br>B64D 11/06<br>(11) EP3197709<br>(21) EP15778129.5<br>(47) 14.07.2021<br>(87) US2015052021<br>31.03.2016<br>(22) 24.09.2015<br>(54) AIRCRAFT SEAT<br>(73) Bombardier Inc.<br>(72) ERHEL, Philippe<br>MEISTER, Pete<br>(31) 201462055439 P<br>(32) 25.09.2014<br>(33) United States of America                                                                                                                                                                                            | (51) B60N 2/809<br>(11) EP2511127<br>(21) EP12001820.5<br>(47) 07.07.2021<br>(22) 15.03.2012<br>(54) Head support for vehicle seats<br>(73) GRAMMER AG<br>(72) Ahlbrand, Marc<br>Willms, Alexander<br>Röttches, Harald<br>(31) 102011017067<br>102011100341<br>(32) 14.04.2011<br>03.05.2011<br>(33) Germany<br>Germany                                                                                                                                                                       |
| (54) SEAT OCCUPANCY DETECTION WITH ACCELERATION SIGNAL<br>(73) GRAMMER AG<br>(72) Übelacker, Roland<br>Wittmann, Hubert                                                                                                                                                                                                                                                         | (51) B60N 2/30<br>B60R 7/04<br>(11) EP3676129<br>(21) EP18766471.9<br>(47) 14.07.2021                                                                                                                                                                                                                                                                                                                                                                                                                                               | (51) B60P 1/28                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

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| (11) EP3527425                              | (51) B60P 7/15                                | XIE, Yan                                  |
| (21) EP18157179.5                           | (11) EP3578416                                | (31) 201710923016                         |
| (47) 07.07.2021                             | (21) EP19177282.1                             | (32) 30.09.2017                           |
| (22) 16.02.2018                             | (47) 07.07.2021                               | (33) China                                |
| (54) LOAD RETENTION SYSTEM                  | (22) 29.05.2019                               | (51) B60Q 1/26                            |
| (73) METSO SWEDEN AB                        | (54) DEVICE FOR SECURING LOADS                | B60R 13/00                                |
| (72) HÄLLEVALL, Niclas                      | (73) Kiesling Fahrzeugbau GmbH                | (11) EP3405366                            |
| PERSSON, Henrik                             | (72) Kiesling, Peter                          | (21) EP17703336.2                         |
| HOFFMANN, Andreas                           | (31) 102018113532                             | (47) 07.07.2021                           |
| (51) B60P 1/42                              | (32) 06.06.2018                               | (87) EP2017051008                         |
| (11) EP3219543                              | (33) Germany                                  | 27.07.2017                                |
| (21) EP17163624.4                           | (51) B60Q 1/00                                | (22) 18.01.2017                           |
| (47) 14.07.2021                             | F21S 45/10                                    | (54) MANUFACTURER'S EMBLEM WITH           |
| (22) 09.02.2010                             | F21S 45/33                                    | BACK-LIGHTING                             |
| (54) GRAIN CART WITH FOLDING AUGER          | F21S 45/50                                    | (73) Gerhardt Kunststofftechnik GmbH      |
| (73) Unverferth Manufacturing Company, Inc. | (11) EP3406965                                | (72) KIESLICH, Dirk                       |
| (72) VAN MILL, Michael D.                   | (21) EP18174192.7                             | (31) 202016000238 U                       |
| SCHLIMGEN, Ronald J.                        | (47) 14.07.2021                               | (32) 18.01.2016                           |
| WALVATNE, John                              | (22) 24.05.2018                               | (33) Germany                              |
| SELF, Christopher M.                        | (54) LIGHTING DEVICE FOR VEHICLES             | (51) B60Q 1/26                            |
| (31) 152521 P                               | WITH IMPROVED LAMP MOUNTING                   | F21V 5/04                                 |
| 228284 P                                    | COVER                                         | G02B 17/00                                |
| 700372                                      | (73) Marelli Automotive Lighting Italy S.p.A. | G02B 17/08                                |
| (32) 13.02.2009                             | (72) BARBERO, Marco                           | G02B 27/09                                |
| 24.07.2009                                  | (31) 201700056441                             | (11) EP2607169                            |
| 04.02.2010                                  | (32) 24.05.2017                               | (21) EP13160382.1                         |
| (33) United States of America               | (33) Italy                                    | (47) 07.07.2021                           |
| United States of America                    | (51) B60Q 1/00                                | (22) 19.05.2008                           |
| United States of America                    | F21Y 105/00                                   | (54) An improved LED device for wide beam |
| (51) B60P 7/08                              | F21Y 115/20                                   | generation and method of making the       |
| B60P 7/10                                   | F21S 41/151                                   | same                                      |
| B65D 5/68                                   | F21S 41/155                                   | (73) Signify Holding B.V.                 |
| B65D 21/08                                  | F21S 41/24                                    | (72) Holder, Ronald, G                    |
| B65D 71/02                                  | F21S 43/14                                    | Rhoads, Greg                              |
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| (22) 03.09.2018                             | F21S 43/249                                   | (51) B60Q 1/28                            |
| (54) SECURING SYSTEM FOR STORING A          | F21S 43/251                                   | B60Q 1/38                                 |
| FILLED LARGE-CAPACITY CONTAINER             | (11) EP2994348                                | B60Q 1/50                                 |
| AND BLANK OF A CLOSURE LID OF               | (21) EP14726505.2                             | B60Q 1/52                                 |
| THE LARGE-CAPACITY CONTAINER                | (47) 14.07.2021                               | (11) EP3693220                            |
| (73) Smurfit Kappa GmbH                     | (87) AT2014050111                             | (21) EP19213026.8                         |
| (72) Schmid, Karl                           | 13.11.2014                                    | (47) 07.07.2021                           |
| (51) B60P 7/135                             | (22) 30.04.2014                               | (22) 02.12.2019                           |
| B60P 7/16                                   | (54) LIGHTING SYSTEM FOR MOTOR                | (54) METHOD FOR OPERATING A SELF-         |
| B65D 81/05                                  | VEHICLES                                      | DRIVING MOTOR VEHICLE                     |
| B65D 81/07                                  | (73) ZKW Group GmbH                           | (73) Ford Global Technologies, LLC        |
| B65D 81/107                                 | (72) REINPRECHT, Markus                       | (72) Sawonski, Anette                     |
| F16F 7/01                                   | MIEDLER, Stefan                               | (31) 102019201666                         |
| F16F 7/14                                   | BÖHM, Gerald                                  | (32) 08.02.2019                           |
| F16F 15/02                                  | TEUFL, Adolf                                  | (33) Germany                              |
| F16F 15/06                                  | EDLETZBERGER, Thomas                          | (51) B60Q 1/50                            |
| F16M 11/04                                  | (31) 503132013                                | B60Q 1/52                                 |
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| (21) EP19177205.2                           | (33) Austria                                  | F21S 41/125                               |
| (47) 07.07.2021                             | (51) B60Q 1/00                                | F21S 41/365                               |
| (22) 29.05.2019                             | G08B 21/02                                    | F21S 41/675                               |
| (54) SYSTEM FOR TRANSPORTING                | G08B 23/00                                    | (11) EP3178696                            |
| FRAGILE OBJECTS                             | (11) EP3462424                                | (21) EP16202238.8                         |
| (73) The Supporting Organization for the    | (21) EP18197777.8                             | (47) 07.07.2021                           |
| Georgia O'Keeffe Museum                     | (47) 14.07.2021                               | (22) 05.12.2016                           |
| (72) KRONKRIGHT, Dale Paul                  | (22) 28.09.2018                               | (54) VEHICULAR HEADLAMP SYSTEM AND        |
| PADILLA, Alex                               | (54) METHOD AND DEVICE FOR MOBILE             | CONTROL METHOD OF VEHICULAR               |
| WITT, Patricia                              | ILLUMINATION, AND STORAGE                     | HEADLAMP                                  |
| (31) 201815995476                           | MEDIUM                                        | (73) TOYOTA JIDOSHA KABUSHIKI KAISHA      |
| (32) 01.06.2018                             | (73) Beijing Xiaomi Mobile Software Co., Ltd. | KOITO MANUFACTURING CO., LTD.             |
| (33) United States of America               | (72) CUI, Qiqi                                | (72) MOURI, Fumihiko                      |

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| NAKADA, Yusuke                                 | (32) 01.11.2017                           | (31) 2017175195                            |
| NAKANISHI, Yoshiyuki                           | 02.07.2018                                | (32) 12.09.2017                            |
| (31) 2015239430                                | 02.07.2018                                | (33) Japan                                 |
| (32) 08.12.2015                                | 02.07.2018                                | (51) B60R 1/00                             |
| (33) Japan                                     | 04.10.2018                                | G08G 1/16                                  |
| (51) B60Q 1/52                                 | (33) United States of America             | H04N 7/18                                  |
| B60Q 7/00                                      | World Intellectual Property Office (WIPO) | (11) EP3708428                             |
| B60Q 9/00                                      | Germany                                   | (21) EP20159361.3                          |
| G06K 9/00                                      | Germany                                   | (47) 07.07.2021                            |
| G08G 1/0955                                    | European Patent Office (EPO)              | (22) 25.02.2020                            |
| G08G 1/16                                      | (51) B60R 1/00                            | (54) IMAGE PRESENTATION FOR                |
| E01F 9/662                                     | B60R 11/04                                | VEHICLES WITH MULTIPLE CAMERAS             |
| (11) EP3590764                                 | B60R 21/00                                | (73) Motherson Innovations Company Limited |
| (21) EP19176347.3                              | B62J 15/00                                | (72) SLAMA, Alexander                      |
| (47) 14.07.2021                                | B62J 99/00                                | (31) 102019105659                          |
| (22) 24.05.2019                                | (11) EP3508407                            | (32) 06.03.2019                            |
| (54) WARNING APPARATUS AND                     | (21) EP17846573.8                         | (33) Germany                               |
| WARNING METHOD                                 | (47) 07.07.2021                           | (51) B60R 1/04                             |
| (73) Hongfujin Precision Electronics (Tianjin) | (87) JP2017031173                         | (11) EP3505398                             |
| Co., Ltd.                                      | 08.03.2018                                | (21) EP18214304.0                          |
| (72) CHIEN, YU-CHING                           | (22) 30.08.2017                           | (47) 14.07.2021                            |
| TSENG, CHUANG-WEI                              | (54) SADDLED VEHICLE                      | (22) 20.12.2018                            |
| (31) 201810644655                              | (73) Honda Motor Co., Ltd.                | (54) IMAGE DISPLAY APPARATUS               |
| (32) 21.06.2018                                | (72) KATAGIRI, Kiyoshi                    | (73) TOYOTA JIDOSHA KABUSHIKI KAISHA       |
| (33) China                                     | MIKI, Masahiro                            | (72) SHIDOUCHI, Yuka                       |
| (51) B60Q 1/52                                 | INOUE, Taishi                             | ASAI, Goro                                 |
| B60T 7/12                                      | KONNO, Takeshi                            | SUGIHARA, Kunihiro                         |
| B62D 15/02                                     | HATAYAMA, Atsushi                         | (31) 2017250901                            |
| G08G 1/16                                      | (31) 2016169945                           | (32) 27.12.2017                            |
| B60W 30/09                                     | (32) 31.08.2016                           | (33) Japan                                 |
| (11) EP3161812                                 | (33) Japan                                | (51) B60R 1/074                            |
| (21) EP15724614.1                              | (51) B60R 1/00                            | B60R 1/076                                 |
| (47) 14.07.2021                                | B62K 23/02                                | (11) EP3697645                             |
| (87) EP2015061205                              | B62J 11/00                                | (21) EP18812362.4                          |
| 30.12.2015                                     | B62J 45/00                                | (47) 07.07.2021                            |
| (22) 21.05.2015                                | B62J 45/20                                | (87) NL2018050692                          |
| (54) METHOD AND DEVICE FOR                     | B62J 50/20                                | 25.04.2019                                 |
| OPERATING A VEHICLE                            | B62J 50/21                                | (22) 22.10.2018                            |
| (73) Robert Bosch GmbH                         | B62J 99/00                                | (54) FASTENING CONSTRUCTION, IN            |
| (72) KUPKA, Bjoern                             | (11) EP3053818                            | PARTICULAR FOR AN EXTERIOR                 |
| (31) 102014212047                              | (21) EP13894956.5                         | VISION UNIT OF A MOTOR VEHICLE             |
| (32) 24.06.2014                                | (47) 07.07.2021                           | (73) MCi (Mirror Controls International)   |
| (33) Germany                                   | (87) JP2013077110                         | Netherlands B.V.                           |
| (51) B60R 1/00                                 | 09.04.2015                                | (72) LIEVAART, Rozemarijn                  |
| B60R 1/06                                      | (22) 04.10.2013                           | WIJNTJES, Jannick Daniël                   |
| B60R 11/04                                     | (54) VEHICLE-MOUNTED VIDEO STORAGE        | USHER, Christian                           |
| (11) EP3681761                                 | DEVICE FOR MOTORCYCLE                     | VAN STIPHOUT, Paulus Gerardus Maria        |
| (21) EP18795652.9                              | (73) Honda Motor Co., Ltd.                | (31) 2019778                               |
| (47) 14.07.2021                                | (72) NOGUCHI, Kohei                       | (32) 20.10.2017                            |
| (87) EP2018079886                              | SASAKI, Takashi                           | (33) Netherlands                           |
| 09.05.2019                                     | (51) B60R 1/00                            | (51) B60R 7/00                             |
| (22) 31.10.2018                                | G06T 3/40                                 | B60R 7/04                                  |
| (54) EXTERNAL REARVIEW DEVICE,                 | H04N 7/18                                 | (11) EP3670267                             |
| EXTERNAL REARVIEW DEVICE KIT                   | G06T 7/80                                 | (21) EP19216589.2                          |
| AND VEHICLE                                    | (11) EP3654280                            | (47) 14.07.2021                            |
| (73) SMR Patents Sarl                          | (21) EP18856233.4                         | (22) 16.12.2019                            |
| (72) LETTIS, Andrew                            | (47) 14.07.2021                           | (54) MOTOR VEHICLE SEAT WITH               |
| REHILL, Graham                                 | (87) JP2018011473                         | STORAGE POCKET AND ASSOCIATED              |
| SCOTT-COLLINS, Callum                          | 21.03.2019                                | MOTOR VEHICLE                              |
| HERRMANN, Andreas                              | (22) 22.03.2018                           | (73) RENAULT s.a.s.                        |
| SCHMIERER, Arne                                | (54) VEHICLE DEVICE, CALIBRATION          | (72) CHHEANG, Nakry                        |
| FIELD, Simon David                             | RESULT DETERMINATION                      | CIMOLI, Patrice                            |
| CHARLET, Francis                               | SYSTEM, CALIBRATION RESULT                | DEMEURS, Lea                               |
| (31) 201715800413                              | DETERMINATION METHOD, AND                 | (31) 1873032                               |
| PCT/EP2018/067842                              | PROGRAM                                   | (32) 17.12.2018                            |
| 102018116008                                   | (73) JVCKenwood Corporation               | (33) France                                |
| 102018116011                                   | (72) NAGAI, Katsuyuki                     | (51) B60R 11/00                            |
| 18198678                                       | ARASE, Takayuki                           |                                            |



|                                   |                                     |                                         |
|-----------------------------------|-------------------------------------|-----------------------------------------|
| B60R 11/02                        | 17.05.2018                          | (54) BODYWORK PART COMPRISING AN        |
| H04R 5/02                         | (22) 11.10.2017                     | OPENING ADAPTED TO RECEIVE A            |
| (11) EP3590272                    | (54) PASSENGER PROTECTION CONTROL   | HATCH                                   |
| (21) EP18708669.9                 | DEVICE                              | (73) Compagnie Plastic Omnium           |
| (47) 14.07.2021                   | (73) Veoneer Sweden AB              | (72) LOUOT, Thierry                     |
| (87) EP2018055118                 | (72) BESSHO, Shuichi                | JEANTON, Raphael                        |
| 07.09.2018                        | AKIYAMA, Kentaro                    | GOMEZ, Jean-François                    |
| (22) 01.03.2018                   | WADA, Aki                           | (31) 1663533                            |
| (54) HEADREST WITH A SUPPORTING   | TORII, Kouhei                       | (32) 29.12.2016                         |
| STRUCTURE FOR LOUDSPEAKERS        | (31) 2016220355                     | (33) France                             |
| AND SEAT WITH SUCH A HEADREST     | (32) 11.11.2016                     | (51) B60R 21/00                         |
| (73) Audio Mobil Elektronik GmbH  | (33) Japan                          | B60R 21/264                             |
| (72) STOTTAN, Thomas              | (51) B60R 16/02                     | (11) EP3681765                          |
| HATHEIER, Thomas                  | H01R 13/73                          | (21) EP18773709.3                       |
| FREI, Richard                     | (11) EP3565067                      | (47) 07.07.2021                         |
| (31) 17158778                     | (21) EP18170013.9                   | (87) DE2018200077                       |
| (32) 01.03.2017                   | (47) 07.07.2021                     | 21.03.2019                              |
| (33) European Patent Office (EPO) | (22) 30.04.2018                     | (22) 16.08.2018                         |
| (51) B60R 11/00                   | (54) AN ELECTRICAL CONNECTION FOR A | (54) GAS GENERATOR                      |
| B60R 11/02                        | TRACTOR-TRAILER                     | (73) Joyson Safety Systems Germany GmbH |
| H04R 5/02                         | (73) Thermo King Corporation        | (72) DIVO, Hans-Jürgen                  |
| B60N 2/806                        | (72) DOERRE, Holger                 | BENZ, Jochen                            |
| B60N 2/812                        | AUGENSTEIN, Eckardt                 | GANSO, Christine-Martina                |
| B60N 2/879                        | (51) B60R 16/03                     | SCHNABL, Roland                         |
| B60N 2/885                        | H02J 7/00                           | KLINGAUF, Gerhard                       |
| (11) EP3414127                    | H02J 9/00                           | (31) 102017216384                       |
| (21) EP17711983.1                 | (11) EP3572889                      | (32) 15.09.2017                         |
| (47) 14.07.2021                   | (21) EP17897091.9                   | (33) Germany                            |
| (87) US2017021625                 | (47) 07.07.2021                     | (51) B60R 21/203                        |
| 21.09.2017                        | (87) CN2017085911                   | (11) EP3672839                          |
| (22) 09.03.2017                   | 23.08.2018                          | (21) EP18753347.6                       |
| (54) ACOUSTIC OUTPUT THROUGH      | (22) 25.05.2017                     | (47) 14.07.2021                         |
| HEADREST WINGS                    | (54) CONTROL CIRCUIT AND CIRCUIT    | (87) EP2018071154                       |
| (73) Bose Corporation             | CONTROL METHOD                      | 28.02.2019                              |
| (72) SUBAT, Bradford, Kyle        | (73) Huawei Technologies Co., Ltd.  | (22) 03.08.2018                         |
| OSWALD, Charles                   | (72) GAO, Chunyu                    | (54) AIRBAG MODULE FOR A VEHICLE        |
| MCCABE, Joseph, Walter            | XIE, Bo                             | STEERING WHEEL                          |
| (31) 201615072925                 | (31) 201710086717                   | (73) ZF Automotive Safety Germany GmbH  |
| (32) 17.03.2016                   | (32) 17.02.2017                     | (72) BACHMANN, Stefan                   |
| (33) United States of America     | (33) China                          | (31) 102017119335                       |
| (51) B60R 13/04                   | (51) B60R 16/037                    | (32) 24.08.2017                         |
| B60R 19/52                        | G10L 15/22                          | (33) Germany                            |
| (11) EP3694750                    | H04M 1/60                           | (51) B60R 21/203                        |
| (21) EP18743492.3                 | G10L 21/0208                        | (11) EP3676132                          |
| (47) 07.07.2021                   | (11) EP3743915                      | (21) EP18756401.8                       |
| (87) EP2018069711                 | (21) EP19707586.4                   | (47) 14.07.2021                         |
| 18.04.2019                        | (47) 07.07.2021                     | (87) EP2018071769                       |
| (22) 20.07.2018                   | (87) US2019017647                   | 07.03.2019                              |
| (54) METHOD FOR MOUNTING A        | 06.08.2020                          | (22) 10.08.2018                         |
| RADIATOR GRILLE, AND RADIATOR     | (22) 12.02.2019                     | (54) SPRING ELEMENT FOR FASTENING       |
| GRILLE FOR A VEHICLE              | (54) USING STRUCTURED AUDIO OUTPUT  | AN AIR BAG MODULE TO A VEHICLE          |
| (73) Audi AG                      | TO DETECT PLAYBACK AND/OR TO        | STEERING WHEEL, AND STEERING            |
| (72) NEUBERGER, Jörg              | ADAPT TO MISALIGNED PLAYBACK IN     | WHEEL ASSEMBLY COMPRISING               |
| HEINZELMANN, Heiner               | WIRELESS SPEAKERS                   | SUCH A SPRING ELEMENT                   |
| BRENDEL, Christian                | (73) Google LLC                     | (73) ZF Automotive Safety Germany GmbH  |
| GARAND, Dany                      | (72) NESIBA, Nathaniel              | (72) BACHMANN, Stefan                   |
| (31) 102017009380                 | CAO, Xiang                          | (31) 102017119886                       |
| (32) 10.10.2017                   | (31) 201962798252 P                 | (32) 30.08.2017                         |
| (33) Germany                      | (32) 29.01.2019                     | (33) Germany                            |
| (51) B60R 16/02                   | (33) United States of America       | (51) B60R 21/205                        |
| B60R 21/013                       | (51) B60R 19/02                     | B60R 21/231                             |
| H02G 3/16                         | B62D 25/24                          | (11) EP3489094                          |
| H05K 5/00                         | (11) EP3342687                      | (21) EP19150524.7                       |
| H05K 5/02                         | (21) EP17207894.1                   | (47) 07.07.2021                         |
| (11) EP3541154                    | (47) 14.07.2021                     | (22) 30.03.2015                         |
| (21) EP17870480.5                 | (22) 18.12.2017                     | (54) VEHICULAR AIRBAG DEVICE            |
| (47) 14.07.2021                   |                                     | (73) Autoliv Development AB             |
| (87) JP2017036792                 |                                     | (72) SUMIYA, Tomohiro                   |

|                                                                                                    |                                                                                  |                                                                                                                                 |
|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| MAENISHI, Kai                                                                                      | (21) EP19216786.4                                                                | DEVICE, AND WEARING DETECTION PROGRAM                                                                                           |
| (31) 2014071437                                                                                    | (47) 07.07.2021                                                                  | (73) Toshiba Digital Solutions Corporation                                                                                      |
| 2014092331                                                                                         | (22) 07.07.2016                                                                  | (72) OHNO, Akifumi                                                                                                              |
| 2014119916                                                                                         | (54) AIRBAG COMPRISING A DIVIDING SEAM AND VEHICLE PASSENGER PROTECTION SYSTEM   | HOSHINO, Tatsuei                                                                                                                |
| (32) 31.03.2014                                                                                    | (73) Dalphi Metal España, S.A.                                                   | MASUDA, Tamotsu                                                                                                                 |
| 28.04.2014                                                                                         | (72) SANTÍN NAVARRO, Pedro, José                                                 | MAESUGI, Satoshi                                                                                                                |
| 10.06.2014                                                                                         | CRESPO VIZÁN, María                                                              | IMAI, Kousuke                                                                                                                   |
| (33) Japan                                                                                         | (31) 202015004724 U                                                              | SHINKAWA, Naoto                                                                                                                 |
| Japan                                                                                              | (32) 07.07.2015                                                                  | (51) B60R 22/185                                                                                                                |
| Japan                                                                                              | (33) Germany                                                                     | (11) EP3684656                                                                                                                  |
| (51) B60R 21/206                                                                                   | (51) B60R 21/235                                                                 | (21) EP18778398.0                                                                                                               |
| B60R 21/231                                                                                        | B60R 21/237                                                                      | (47) 07.07.2021                                                                                                                 |
| B62D 1/19                                                                                          | (11) EP3212469                                                                   | (87) EP2018075024                                                                                                               |
| (11) EP3725642                                                                                     | (21) EP15790427.7                                                                | 21.03.2019                                                                                                                      |
| (21) EP19192579.1                                                                                  | (47) 14.07.2021                                                                  | (22) 17.09.2018                                                                                                                 |
| (47) 07.07.2021                                                                                    | (87) US2015057491                                                                | (54) BELT TONGUE HAVING A COVER                                                                                                 |
| (22) 20.08.2019                                                                                    | 06.05.2016                                                                       | (73) Autoliv Development AB                                                                                                     |
| (54) KNEE AIRBAG FOR VEHICLES                                                                      | (22) 27.10.2015                                                                  | (72) HERMANN, Michel                                                                                                            |
| (73) HYUNDAI MOTOR COMPANY                                                                         | (54) METHOD TO MANUFACTURE AIRBAG MINI PACKS                                     | BERG, Robert                                                                                                                    |
| Kia Motors Corporation                                                                             | (73) Key Safety Systems, Inc.                                                    | (31) 102017121613                                                                                                               |
| Hyundai Mobis Co., Ltd.                                                                            | (72) VOLKMANN, Matthias                                                          | (32) 18.09.2017                                                                                                                 |
| (72) BANG, Jun Ho                                                                                  | PIERUCH, Martin                                                                  | (33) Germany                                                                                                                    |
| YIM, Ji Yong                                                                                       | (31) 201462069087 P                                                              | (51) B60R 22/38                                                                                                                 |
| KO, Seok Hoon                                                                                      | (32) 27.10.2014                                                                  | B60R 22/405                                                                                                                     |
| KIM, Do Hyung                                                                                      | (33) United States of America                                                    | (11) EP3463992                                                                                                                  |
| (31) 20190043466                                                                                   | (51) B60R 21/264                                                                 | (21) EP17726632.7                                                                                                               |
| (32) 15.04.2019                                                                                    | (11) EP3490849                                                                   | (47) 07.07.2021                                                                                                                 |
| (33) Korea (Republic)                                                                              | (21) EP17742432.2                                                                | (87) EP2017063078                                                                                                               |
| (51) B60R 21/23                                                                                    | (47) 07.07.2021                                                                  | 14.12.2017                                                                                                                      |
| D03D 1/02                                                                                          | (87) EP2017068461                                                                | (22) 31.05.2017                                                                                                                 |
| D06M 15/643                                                                                        | 01.02.2018                                                                       | (54) WEBBING RETRACTOR FOR VEHICLE SEAT BELTS                                                                                   |
| D06M 101/34                                                                                        | (22) 21.07.2017                                                                  | (73) ZF Automotive Germany GmbH                                                                                                 |
| (11) EP3279377                                                                                     | (54) PYROTECHNIC GAS GENERATOR AND METHOD OF MANUFACTURE OF SUCH A GAS GENERATOR | (72) HIRSCH, Johann                                                                                                             |
| (21) EP16772739.5                                                                                  | (73) ZF Airbag Germany GmbH                                                      | RINK, Jürgen                                                                                                                    |
| (47) 14.07.2021                                                                                    | (72) FRIEDRICH, Jörg                                                             | LITTAU, Friedrich                                                                                                               |
| (87) JP2016059923                                                                                  | JAHNEL, Siegfried                                                                | (31) 102016006750                                                                                                               |
| 06.10.2016                                                                                         | (31) 102016113732                                                                | (32) 06.06.2016                                                                                                                 |
| (22) 28.03.2016                                                                                    | (32) 26.07.2016                                                                  | (33) Germany                                                                                                                    |
| (54) COATED BASE FABRIC FOR AIRBAG, AIRBAG, AND METHOD FOR PRODUCING COATED BASE FABRIC FOR AIRBAG | (33) Germany                                                                     | (51) B60R 25/01                                                                                                                 |
| (73) Toray Industries, Inc.                                                                        | (51) B60R 21/34                                                                  | B60R 25/30                                                                                                                      |
| (72) HOSAKA, Taiki                                                                                 | B60J 5/10                                                                        | (11) EP3653453                                                                                                                  |
| YOKOI, Daisuke                                                                                     | (11) EP3670274                                                                   | (21) EP19207435.9                                                                                                               |
| (31) 2015069982                                                                                    | (21) EP19216013.3                                                                | (47) 07.07.2021                                                                                                                 |
| (32) 30.03.2015                                                                                    | (47) 14.07.2021                                                                  | (22) 06.11.2019                                                                                                                 |
| (33) Japan                                                                                         | (22) 13.12.2019                                                                  | (54) ANTI VEHICLE-MOUNTING APPARATUS                                                                                            |
| (51) B60R 21/231                                                                                   | (54) BODY PART COMPRISING A LOCKING LOOP                                         | (73) Tailmaster (UK & Europe) Limited                                                                                           |
| B60R 21/36                                                                                         | (73) Compagnie Plastic Omnium                                                    | (72) Barrington, Kevin                                                                                                          |
| B60R 21/233                                                                                        | (72) COUDRON, Philippe                                                           | (31) 201818447                                                                                                                  |
| B60R 21/239                                                                                        | (31) 1873929                                                                     | (32) 13.11.2018                                                                                                                 |
| (11) EP3428017                                                                                     | (32) 21.12.2018                                                                  | (33) United Kingdom                                                                                                             |
| (21) EP18175798.0                                                                                  | (33) France                                                                      | (51) B60R 25/24                                                                                                                 |
| (47) 07.07.2021                                                                                    | (51) B60R 22/12                                                                  | G07C 9/00                                                                                                                       |
| (22) 10.02.2015                                                                                    | B60R 22/48                                                                       | (11) EP3642085                                                                                                                  |
| (54) PEDESTRIAN AIRBAG CUSHION ASSEMBLY WITH ONE-WAY CHECK VALVES                                  | (11) EP3508385                                                                   | (21) EP18726992.3                                                                                                               |
| (73) Key Safety Systems, Inc.                                                                      | (21) EP16915097.6                                                                | (47) 14.07.2021                                                                                                                 |
| (72) PIERUCH, Martin                                                                               | (47) 14.07.2021                                                                  | (87) EP2018063596                                                                                                               |
| VOLKMANN, Matthias                                                                                 | (87) JP2016075446                                                                | 27.12.2018                                                                                                                      |
| (31) 201461938362 P                                                                                | 08.03.2018                                                                       | (22) 24.05.2018                                                                                                                 |
| (32) 11.02.2014                                                                                    | (22) 31.08.2016                                                                  | (54) METHOD FOR OPERATING AN ANTI-THEFT SYSTEM OF A MOTOR VEHICLE AND MOTOR VEHICLE HAVING A MOBILE TERMINAL AS THE VEHICLE KEY |
| (33) United States of America                                                                      | (54) WEARING DETECTION APPARATUS, IMAGING APPARATUS, RESTRAINT                   | (73) Volkswagen Aktiengesellschaft                                                                                              |
| (51) B60R 21/231                                                                                   |                                                                                  | (72) BRÜCKNER, Claus-Peter                                                                                                      |
| D05B 93/00                                                                                         |                                                                                  |                                                                                                                                 |
| (11) EP3656616                                                                                     |                                                                                  |                                                                                                                                 |

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|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------|
| (31) 102017210568                                                                                                                    | (72) SHEPHERD, Richard                                                   | 27.12.2018                                                         |
| (32) 22.06.2017                                                                                                                      | (31) 201762466057 P                                                      | (22) 21.06.2017                                                    |
| (33) Germany                                                                                                                         | (32) 02.03.2017                                                          | (54) BRAKING DEVICE AND METHOD                                     |
| (51) B60R 25/40                                                                                                                      | (33) United States of America                                            | (73) Erke Erke Arastirmalari Ve Mühendislik A.S.                   |
| (11) EP3292027                                                                                                                       | (51) B60S 1/52                                                           | (72) ÖZTÜRK, Mustafa Naci                                          |
| (21) EP16720422.1                                                                                                                    | B60S 1/56                                                                | (51) B60T 7/08                                                     |
| (47) 07.07.2021                                                                                                                      | (11) EP3429896                                                           | (11) EP3558767                                                     |
| (87) EP2016059973                                                                                                                    | (21) EP17708826.7                                                        | (21) EP17826565.8                                                  |
| 10.11.2016                                                                                                                           | (47) 07.07.2021                                                          | (47) 07.07.2021                                                    |
| (22) 04.05.2016                                                                                                                      | (87) EP2017055455                                                        | (87) IB2017057923                                                  |
| (54) ENTRY SYSTEM WITH BACKUP OPERATION FOR A MOTOR VEHICLE                                                                          | 21.09.2017                                                               | 28.06.2018                                                         |
| (73) Marquardt GmbH                                                                                                                  | (22) 08.03.2017                                                          | (22) 14.12.2017                                                    |
| (72) MÜLLER, Karl                                                                                                                    | (54) DEVICE FOR CLEANING AN OPTICAL DETECTION SYSTEM FOR A MOTOR VEHICLE | (54) LEVER ASSEMBLY                                                |
| STEHLE, Wolfgang                                                                                                                     | (73) Valeo Systèmes d'Essuyage                                           | (73) Freni Brembo S.p.A.                                           |
| VOGEL, Stefan                                                                                                                        | (72) GIRAUD, Frédéric                                                    | (72) LAVEZZI, Roberto                                              |
| (31) 102015005549                                                                                                                    | TREBOUET, Marcel                                                         | ESPOSITO, Alessandro                                               |
| (32) 04.05.2015                                                                                                                      | (31) 1652128                                                             | MAGGIONI, Ivan                                                     |
| (33) Germany                                                                                                                         | (32) 14.03.2016                                                          | (31) 201600130793                                                  |
| (51) B60S 1/08                                                                                                                       | (33) France                                                              | (32) 23.12.2016                                                    |
| B60S 1/48                                                                                                                            | (51) B60S 3/04                                                           | (33) Italy                                                         |
| (11) EP3433143                                                                                                                       | (11) EP3286046                                                           | (51) B60T 7/12                                                     |
| (21) EP17711229.9                                                                                                                    | (21) EP16718985.1                                                        | B60T 7/22                                                          |
| (47) 14.07.2021                                                                                                                      | (47) 07.07.2021                                                          | B60T 8/1755                                                        |
| (87) EP2017056596                                                                                                                    | (87) US2016028672                                                        | G08G 1/16                                                          |
| 28.09.2017                                                                                                                           | 27.10.2016                                                               | B60W 30/09                                                         |
| (22) 20.03.2017                                                                                                                      | (22) 21.04.2016                                                          | B60W 30/095                                                        |
| (54) METHOD AND SYSTEM FOR CONTROLLING THE CLEANING OF A VEHICLE WINDOW, AND ASSEMBLY COMPRISING SUCH A SYSTEM AND A CLEANING DEVICE | (54) FLUID DELIVERY SYSTEM FOR A VEHICLE WASH SYSTEM                     | (11) EP3008712                                                     |
| (73) Valeo Systèmes d'Essuyage                                                                                                       | (73) Washme Properties, LLC                                              | (21) EP14728972.2                                                  |
| (72) THEBAULT, Denis                                                                                                                 | (72) BELANGER, Michael, J.                                               | (47) 07.07.2021                                                    |
| GIRAUD, Frédéric                                                                                                                     | PRATER, Curtis, S.                                                       | (87) EP2014061869                                                  |
| TERRASSE, Jean-Luc                                                                                                                   | TURNER, Barry, S.                                                        | 18.12.2014                                                         |
| (31) 1652518                                                                                                                         | (31) 201562150373 P                                                      | (22) 06.06.2014                                                    |
| (32) 24.03.2016                                                                                                                      | (32) 21.04.2015                                                          | (54) METHOD AND DEVICE FOR PERFORMING COLLISION-AVOIDANCE MEASURES |
| (33) France                                                                                                                          | (33) United States of America                                            | (73) Valeo Schalter und Sensoren GmbH                              |
| (51) B60S 1/16                                                                                                                       | (51) B60S 13/00                                                          | (72) SPENCER, Martin                                               |
| H02K 7/116                                                                                                                           | E04H 6/18                                                                | KOEHLER, Michael                                                   |
| H02P 6/16                                                                                                                            | E04H 6/24                                                                | (31) 102013010004                                                  |
| (11) EP3516764                                                                                                                       | E04H 6/30                                                                | (32) 14.06.2013                                                    |
| (21) EP17742443.9                                                                                                                    | E04H 6/32                                                                | (33) Germany                                                       |
| (47) 14.07.2021                                                                                                                      | (11) EP3297876                                                           | (51) B60T 7/22                                                     |
| (87) EP2017068822                                                                                                                    | (21) EP16731216.4                                                        | B60T 8/171                                                         |
| 29.03.2018                                                                                                                           | (47) 07.07.2021                                                          | B60T 8/1755                                                        |
| (22) 26.07.2017                                                                                                                      | (87) FR2016051195                                                        | G01S 13/86                                                         |
| (54) GEAR MOTOR, ASSOCIATED WIPER SYSTEM AND ASSOCIATED CONTROL METHOD                                                               | 01.12.2016                                                               | G08G 1/16                                                          |
| (73) Valeo Systèmes d'Essuyage                                                                                                       | (22) 19.05.2016                                                          | B60W 30/09                                                         |
| (72) FLOQUET, Frédéric                                                                                                               | (54) MOVABLE CONVEYORS FOR MOVING A FOUR-WHEEL VEHICLE                   | G01S 13/931                                                        |
| HERRADA, Jose-Luis                                                                                                                   | (73) Stanley Robotics                                                    | (11) EP3683112                                                     |
| (31) 1658926                                                                                                                         | (72) BOUSSARD, Clément                                                   | (21) EP19203906.3                                                  |
| (32) 22.09.2016                                                                                                                      | CORD, Aurélien                                                           | (47) 07.07.2021                                                    |
| (33) France                                                                                                                          | (31) 1554528                                                             | (22) 17.10.2019                                                    |
| (51) B60S 1/34                                                                                                                       | (32) 20.05.2015                                                          | (54) COLLISION AVOIDANCE CONTROL APPARATUS                         |
| B60S 1/42                                                                                                                            | (33) France                                                              | (73) TOYOTA JIDOSHA KABUSHIKI KAISHA                               |
| (11) EP3565746                                                                                                                       | (51) B60T 1/06                                                           | (72) SHIMBO, Yuto                                                  |
| (21) EP18708566.7                                                                                                                    | B60T 1/10                                                                | HOSHIKAWA, Yuma                                                    |
| (47) 14.07.2021                                                                                                                      | B60T 1/12                                                                | (31) 2019004205                                                    |
| (87) US2018019094                                                                                                                    | B60T 13/06                                                               | (32) 15.01.2019                                                    |
| 07.09.2018                                                                                                                           | F16D 61/00                                                               | (33) Japan                                                         |
| (22) 22.02.2018                                                                                                                      | F16D 63/00                                                               | (51) B60T 8/17                                                     |
| (54) REDUCED ARC WINDSHIELD WIPER SYSTEM FOR A VEHICLE                                                                               | F16H 33/10                                                               | (11) EP3640101                                                     |
| (73) Siemens Mobility, Inc.                                                                                                          | G01C 19/00                                                               | (21) EP19203109.4                                                  |
|                                                                                                                                      | (11) EP3642509                                                           | (47) 07.07.2021                                                    |
|                                                                                                                                      | (21) EP17731896.1                                                        | (22) 14.10.2019                                                    |
|                                                                                                                                      | (47) 07.07.2021                                                          | (54) BRAKE VARIATION DERIVED CONTROLLER RE-SET SCHEDULE            |
|                                                                                                                                      | (87) EP2017065297                                                        |                                                                    |

|                                  |                                       |                                    |
|----------------------------------|---------------------------------------|------------------------------------|
| (73) Goodrich Corporation        | (47) 07.07.2021                       | (73) Honda Motor Co., Ltd.         |
| (72) ARSENAULT, Tyler            | (22) 07.09.2018                       | (72) IGUCHI, Takamasa              |
| (31) 201816160835                | (54) AIRCRAFT BRAKE TORQUE AND        | (31) 2016195270                    |
| (32) 15.10.2018                  | CLAMP FORCE REACTION THROUGH          | (32) 30.09.2016                    |
| (33) United States of America    | LANDING GEAR STRUCTURE                | (33) Japan                         |
| (51) B60T 8/17                   | (73) Goodrich Corporation             | (51) B60T 13/22                    |
| B60T 8/1766                      | (72) WHITTLE, Scott                   | B60T 17/08                         |
| (11) EP3634821                   | (31) 201715699719                     | (11) EP3365207                     |
| (21) EP18721318.6                | (32) 08.09.2017                       | (21) EP16785132.8                  |
| (47) 07.07.2021                  | (33) United States of America         | (47) 07.07.2021                    |
| (87) EP2018060400                | (51) B60T 8/17                        | (87) EP2016075296                  |
| 13.12.2018                       | B64C 25/46                            | 27.04.2017                         |
| (22) 24.04.2018                  | (11) EP2878501                        | (22) 20.10.2016                    |
| (54) METHOD AND BRAKING SYSTEM   | (21) EP14195200.2                     | (54) A POWERED VEHICLE INCLUDING A |
| FOR ELECTRONICALLY SETTING THE   | (47) 07.07.2021                       | SAHR BRAKE                         |
| BRAKE FORCE DISTRIBUTION AND     | (22) 27.11.2014                       | (73) CNH Industrial Italia S.P.A.  |
| MOTOR VEHICLE HAVING SUCH A      | (54) Aircraft electric braking system | (72) GRECO LUCCHINO, Stefano       |
| BRAKING SYSTEM                   | (73) Airbus Operations Limited        | PASSALACQUA, Gianni                |
| (73) ZF CV Systems Hannover GmbH | (72) Iordanidis, George               | PRANDINI, Pier Paolo               |
| (72) FLAUM, Nikolai              | Rees, John                            | (31) UB20155206                    |
| WALLBAUM, Torsten                | (31) 201320938                        | (32) 21.10.2015                    |
| (31) 102017005501                | (32) 27.11.2013                       | (33) Italy                         |
| (32) 09.06.2017                  | (33) United Kingdom                   | (51) B60T 13/26                    |
| (33) Germany                     | (51) B60T 8/32                        | B60T 13/68                         |
| (51) B60T 8/17                   | B60T 13/68                            | (11) EP3691941                     |
| B60T 8/32                        | B60T 15/02                            | (21) EP17778293.5                  |
| B60T 17/22                       | (11) EP3623239                        | (47) 07.07.2021                    |
| (11) EP3184383                   | (21) EP18193587.5                     | (87) EP2017075210                  |
| (21) EP16205316.9                | (47) 07.07.2021                       | 11.04.2019                         |
| (47) 14.07.2021                  | (22) 11.09.2018                       | (22) 04.10.2017                    |
| (22) 20.12.2016                  | (54) CONFIGURATION MODULE             | (54) BY-PASS OF AIR SUPPLY         |
| (54) STAGED METHOD TO DETECT     | (73) KNORR-BREMSE Systeme für         | PROTECTION FOR ELECTRONIC          |
| BRAKE FAIL CONDITIONS IN BRAKE   | Schienenfahrzeuge GmbH                | PARKING BRAKE SYSTEM AND           |
| CONTROL SYSTEMS                  | (72) Hemmings, Mark                   | VEHICLE COMPRISING SUCH            |
| (73) Goodrich Corporation        | (51) B60T 8/40                        | SYSTEM                             |
| (72) GEORGIN, Marc               | B60T 13/66                            | (73) Volvo Lastvagnar AB           |
| METZGER, Jr., Richard Paul       | (11) EP3554901                        | (72) FARRES, Lionel                |
| (31) 201514979029                | (21) EP17781118.9                     | LONG, Christophe                   |
| (32) 22.12.2015                  | (47) 14.07.2021                       | (51) B60T 13/38                    |
| (33) United States of America    | (87) EP2017075736                     | B60T 13/66                         |
| (51) B60T 8/17                   | 21.06.2018                            | B60T 13/68                         |
| B60T 8/32                        | (22) 10.10.2017                       | B60T 15/24                         |
| B64C 25/46                       | (54) METHOD FOR CONTROLLING A         | B60T 17/22                         |
| (11) EP3653456                   | HYDRAULIC BRAKE SYSTEM IN A           | (11) EP3341253                     |
| (21) EP19205024.3                | VEHICLE                               | (21) EP16750445.5                  |
| (47) 07.07.2021                  | (73) Robert Bosch GmbH                | (47) 07.07.2021                    |
| (22) 24.10.2019                  | (72) SCHMIDT, Thomas                  | (87) EP2016069201                  |
| (54) SYSTEM AND METHOD FOR       | STREHLE, Alfred                       | 02.03.2017                         |
| RAPID CONVERGENCE ANTISKID       | BRAND, Mirko                          | (22) 12.08.2016                    |
| INITIALIZATION                   | (31) 102016224896                     | (54) ELECTRIC PARKING BRAKE WITH   |
| (73) Goodrich Corporation        | (32) 14.12.2016                       | AUXILIARY POWER SUPPLY             |
| (72) ARSENAULT, Tyler            | (33) Germany                          | (73) KNORR-BREMSE Systeme für      |
| MASTROCOLA, Naison E.            | (51) B60T 11/06                       | Nutzfahrzeuge GmbH                 |
| (31) 201862752242 P              | B62J 15/00                            | (72) FEUCHT, Thomas                |
| 201816224196                     | B62J 23/00                            | HERGES, Michael                    |
| (32) 29.10.2018                  | B62K 11/02                            | (31) 102015114176                  |
| 18.12.2018                       | B62K 19/30                            | (32) 26.08.2015                    |
| (33) United States of America    | B62K 19/38                            | (33) Germany                       |
| United States of America         | B62L 3/04                             | (51) B60T 13/38                    |
| (51) B60T 8/17                   | B62L 3/08                             | F16D 65/28                         |
| B64C 25/02                       | (11) EP3521151                        | F16D 127/02                        |
| B64C 25/34                       | (21) EP17856369.8                     | (11) EP2982556                     |
| B64C 25/44                       | (47) 07.07.2021                       | (21) EP14778136.3                  |
| F16D 55/36                       | (87) JP2017035320                     | (47) 07.07.2021                    |
| F16D 65/18                       | 05.04.2018                            | (87) JP2014058709                  |
| F16D 65/847                      | (22) 28.09.2017                       | 09.10.2014                         |
| (11) EP3453614                   | (54) INTERLOCKING BRAKE STRUCTURE     | (22) 27.03.2014                    |
| (21) EP18193295.5                | FOR SADDLE-TYPE VEHICLE               |                                    |

|                                                                                                     |                                                                                            |                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) BRAKE CYLINDER DEVICE AND<br>BRAKE DEVICE                                                      | (87) EP2018064013<br>21.02.2019                                                            | (33) United Kingdom                                                                                                                                                                                                 |
| (73) Nabtesco Corporation                                                                           | (22) 29.05.2018                                                                            | (51) B60T 17/22                                                                                                                                                                                                     |
| (72) ASANO, Yoshio<br>OIE, Hideyuki                                                                 | (54) ELECTROPNEUMATIC PARKING<br>BRAKE MODULE WITH DIRECTLY<br>CONTROLLED VALVES           | F16D 66/00                                                                                                                                                                                                          |
| (31) 2013077431                                                                                     | (73) ZF CV Systems Hannover GmbH                                                           | (11) EP3159232                                                                                                                                                                                                      |
| (32) 03.04.2013                                                                                     | (72) BENSCH, Uwe                                                                           | (21) EP16194324.6                                                                                                                                                                                                   |
| (33) Japan                                                                                          | (31) 102017007780                                                                          | (47) 07.07.2021                                                                                                                                                                                                     |
| (51) B60T 13/66                                                                                     | (32) 16.08.2017                                                                            | (22) 18.10.2016                                                                                                                                                                                                     |
| B60T 17/22                                                                                          | (33) Germany                                                                               | (54) BRAKE MONITORING SYSTEM                                                                                                                                                                                        |
| (11) EP3512745                                                                                      | (51) B60T 13/74                                                                            | (73) Goodrich Corporation                                                                                                                                                                                           |
| (21) EP17758831.6                                                                                   | F04C 2/107                                                                                 | (72) BURTE, Paul R.                                                                                                                                                                                                 |
| (47) 07.07.2021                                                                                     | (11) EP3330144                                                                             | WALSH, Andrew                                                                                                                                                                                                       |
| (87) EP2017070880                                                                                   | (21) EP16306606.1                                                                          | ROOK, Todd                                                                                                                                                                                                          |
| 22.03.2018                                                                                          | (47) 14.07.2021                                                                            | (31) 201514887069                                                                                                                                                                                                   |
| (22) 17.08.2017                                                                                     | (22) 02.12.2016                                                                            | (32) 19.10.2015                                                                                                                                                                                                     |
| (54) BRAKE CONTROL DEVICE AND<br>METHOD FOR CONTROLLING A<br>BRAKING DEVICE OF A RAILWAY<br>VEHICLE | (54) SCREW PUMP                                                                            | (33) United States of America                                                                                                                                                                                       |
| (73) KNORR-BREMSE Systeme für<br>Schienenfahrzeuge GmbH                                             | (73) Ratier-Figeac SAS                                                                     | (51) B60T 17/22                                                                                                                                                                                                     |
| (72) SCHNEIDER, Stefan<br>BRÄUNLICH, Marco                                                          | (72) VERMANDE, Frédéric                                                                    | F16D 66/02                                                                                                                                                                                                          |
| RASEL, Thomas                                                                                       | (51) B60T 15/04                                                                            | G01B 5/00                                                                                                                                                                                                           |
| KOVACS, Kristian                                                                                    | F16K 11/02                                                                                 | (11) EP3650804                                                                                                                                                                                                      |
| (31) 102016117244                                                                                   | F16K 11/07                                                                                 | (21) EP19207319.5                                                                                                                                                                                                   |
| (32) 14.09.2016                                                                                     | (11) EP3630568                                                                             | (47) 07.07.2021                                                                                                                                                                                                     |
| (33) Germany                                                                                        | (21) EP18730269.0                                                                          | (22) 05.11.2019                                                                                                                                                                                                     |
| (51) B60T 13/66                                                                                     | (47) 07.07.2021                                                                            | (54) MEASURING THE LENGTH OF A<br>WEAR INDICATOR                                                                                                                                                                    |
| B60T 17/22                                                                                          | (87) EP2018063962                                                                          | (73) Honeywell International Inc.                                                                                                                                                                                   |
| (11) EP3676143                                                                                      | 06.12.2018                                                                                 | (72) HUANG, Hua                                                                                                                                                                                                     |
| (21) EP18766140.0                                                                                   | (22) 28.05.2018                                                                            | FELTS, Braxton                                                                                                                                                                                                      |
| (47) 07.07.2021                                                                                     | (54) WAY VALVE FOR PNEUMATIC CIRCUIT                                                       | DALTON, Dennis Norman Oswell                                                                                                                                                                                        |
| (87) EP2018072765                                                                                   | (73) KNORR-BREMSE Systeme für<br>Nutzfahrzeuge GmbH                                        | LI, Qixiang                                                                                                                                                                                                         |
| 07.03.2019                                                                                          | (72) KONCZ, Laszlo                                                                         | MYLARASWAMY, Dinkar                                                                                                                                                                                                 |
| (22) 23.08.2018                                                                                     | (31) 102017112104                                                                          | AREND, Matthew                                                                                                                                                                                                      |
| (54) METHOD FOR DETERMINING THE<br>SAFETY-RELEVANT STATE OF THE<br>BRAKES OF RAIL VEHICLES          | (32) 01.06.2017                                                                            | MOORE, Joshua Allen                                                                                                                                                                                                 |
| (73) KNORR-BREMSE Systeme für<br>Schienenfahrzeuge GmbH                                             | (33) Germany                                                                               | (31) 201862757426 P                                                                                                                                                                                                 |
| (72) VOLLMER, Achim                                                                                 | (51) B60T 17/00                                                                            | 201916532698                                                                                                                                                                                                        |
| SÜSSMANN, Alexander                                                                                 | (11) EP3687872                                                                             | (32) 08.11.2018                                                                                                                                                                                                     |
| (31) 102017215290                                                                                   | (21) EP18779268.4                                                                          | 06.08.2019                                                                                                                                                                                                          |
| (32) 31.08.2017                                                                                     | (47) 07.07.2021                                                                            | (33) United States of America                                                                                                                                                                                       |
| (33) Germany                                                                                        | (87) EP2018075138                                                                          | United States of America                                                                                                                                                                                            |
| (51) B60T 13/66                                                                                     | 04.04.2019                                                                                 | (51) B60W 10/02                                                                                                                                                                                                     |
| B60T 17/22                                                                                          | (22) 18.09.2018                                                                            | B60W 10/06                                                                                                                                                                                                          |
| B61H 5/00                                                                                           | (54) NOISE DAMPER FOR COMPRESSED<br>AIR SYSTEMS AND A METHOD FOR<br>THE PRODUCTION OF SAME | B60W 10/08                                                                                                                                                                                                          |
| (11) EP3676140                                                                                      | (73) KNORR-BREMSE Systeme für<br>Nutzfahrzeuge GmbH                                        | B60K 6/387                                                                                                                                                                                                          |
| (21) EP18765038.7                                                                                   | (72) SOVAGO, Szabolcs                                                                      | B60K 6/48                                                                                                                                                                                                           |
| (47) 07.07.2021                                                                                     | TANCZOS, Miklos                                                                            | B60W 20/40                                                                                                                                                                                                          |
| (87) EP2018072627                                                                                   | FEKETE, Marton                                                                             | (11) EP3645325                                                                                                                                                                                                      |
| 07.03.2019                                                                                          | BUJDOSO, Daniel                                                                            | (21) EP18730222.9                                                                                                                                                                                                   |
| (22) 22.08.2018                                                                                     | (31) 102017122215                                                                          | (47) 07.07.2021                                                                                                                                                                                                     |
| (54) BRAKE ACTUATOR FOR A RAIL<br>VEHICLE                                                           | (32) 26.09.2017                                                                            | (87) DE2018100510                                                                                                                                                                                                   |
| (73) KNORR-BREMSE Systeme für<br>Schienenfahrzeuge GmbH                                             | (33) Germany                                                                               | 03.01.2019                                                                                                                                                                                                          |
| (72) VOLLMER, Achim                                                                                 | (51) B60T 17/22                                                                            | (22) 25.05.2018                                                                                                                                                                                                     |
| (31) 102017215293                                                                                   | (11) EP3527444                                                                             | (54) METHOD AND OPEN-LOOP AND<br>CLOSED-LOOP CONTROL DEVICE<br>FOR COMPENSATING FOR A<br>CLUTCH TORQUE OF A HYBRID<br>SEPARATING CLUTCH TAKING INTO<br>CONSIDERATION THE ROTATIONAL<br>SPEED OF AN ELECTRIC MACHINE |
| (32) 31.08.2017                                                                                     | (21) EP19157288.2                                                                          | (73) Schaeffler Technologies GmbH & Co. KG                                                                                                                                                                          |
| (33) Germany                                                                                        | (47) 07.07.2021                                                                            | (72) WEBER, Christian                                                                                                                                                                                               |
| (51) B60T 13/68                                                                                     | (22) 14.02.2019                                                                            | MANNSPERGER, Ralf                                                                                                                                                                                                   |
| (11) EP3668767                                                                                      | (54) CONTROLLER FOR AN AIRCRAFT<br>BRAKING SYSTEM                                          | (31) 102017114055                                                                                                                                                                                                   |
| (21) EP18728849.3                                                                                   | (73) Airbus Operations Limited                                                             | (32) 26.06.2017                                                                                                                                                                                                     |
| (47) 07.07.2021                                                                                     | (72) CRANE, Nicholas                                                                       | (33) Germany                                                                                                                                                                                                        |
|                                                                                                     | HARRISON, Adrian                                                                           | (51) B60W 10/02                                                                                                                                                                                                     |
|                                                                                                     | (31) 201802485                                                                             | B60W 10/06                                                                                                                                                                                                          |
|                                                                                                     | (32) 15.02.2018                                                                            | B60W 10/08                                                                                                                                                                                                          |
|                                                                                                     |                                                                                            | B60W 30/20                                                                                                                                                                                                          |
|                                                                                                     |                                                                                            | F02N 11/00                                                                                                                                                                                                          |

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|--------------------------------------|-------------------------------------------|----------------------------------------------|
| B60K 6/48                            | 30.07.2015                                | (87) JP2016079501                            |
| F02N 99/00                           | (22) 26.11.2014                           | 12.04.2018                                   |
| B60W 20/40                           | (54) DRIVELINE AND METHOD OF              | (22) 04.10.2016                              |
| (11) EP3231653                       | CONTROLLING A DRIVELINE                   | (54) PARKING CONTROL METHOD AND              |
| (21) EP17165895.8                    | (73) Jaguar Land Rover Limited            | PARKING CONTROL DEVICE                       |
| (47) 14.07.2021                      | (72) RICHARDS, Karl                       | (73) Nissan Motor Co., Ltd.                  |
| (22) 11.04.2017                      | OWEN, Simon                               | Renault S.A.S.                               |
| (54) CONTROL DEVICE FOR VEHICLE      | (31) 201401182                            | (72) SUZUKI, Yasuhiro                        |
| (73) Toyota Jidosha Kabushiki Kaisha | (32) 24.01.2014                           | HAYAKAWA, Yasuhisa                           |
| (72) NAKANISHI, Naoki                | (33) United Kingdom                       | TANIGUCHI, Yohei                             |
| TSUTSUMI, Takahiko                   | (51) B60W 10/20                           | (51) B60W 30/06                              |
| TAKANAMI, Youji                      | B62D 15/02                                | B62D 15/02                                   |
| (31) 2016080222                      | G06K 9/00                                 | (11) EP3674177                               |
| (32) 13.04.2016                      | G08G 1/16                                 | (21) EP19218473.7                            |
| (33) Japan                           | B60W 30/08                                | (47) 14.07.2021                              |
| (51) B60W 10/06                      | B60W 30/095                               | (22) 20.12.2019                              |
| B60W 10/30                           | B60W 30/18                                | (54) ONBOARD PROCESSING DEVICE AND           |
| B60W 50/00                           | B60W 30/12                                | CONTROL METHOD FOR ONBOARD                   |
| F01K 9/00                            | G05D 1/02                                 | PROCESSING DEVICE                            |
| F01K 13/02                           | (11) EP3357777                            | (73) Clarion Co., Ltd.                       |
| F01K 23/06                           | (21) EP16850903.2                         | (72) TAGAWA, Shinya                          |
| F01K 23/10                           | (47) 14.07.2021                           | SAKANO, Morihiko                             |
| F02G 5/00                            | (87) JP2016073031                         | IWANO, Katsumi                               |
| (11) EP3411586                       | 06.04.2017                                | (31) 2018240709                              |
| (21) EP17747865.8                    | (22) 05.08.2016                           | (32) 25.12.2018                              |
| (47) 07.07.2021                      | (54) LANE CHANGE SYSTEM                   | (33) Japan                                   |
| (87) SE2017050018                    | (73) Hitachi Automotive Systems, Ltd.     | (51) B60W 30/10                              |
| 10.08.2017                           | (72) SUGAWARA, Toshiharu                  | B60W 50/00                                   |
| (22) 11.01.2017                      | IMAI, Masato                              | B60W 30/095                                  |
| (54) A METHOD FOR CONTROLLING THE    | YOROZUYA, Kiyoshi                         | B60W 30/18                                   |
| TEMPERATURE OF A WASTE HEAT          | (31) 2015192516                           | (11) EP3013658                               |
| RECOVERY SYSTEM AND SUCH A           | (32) 30.09.2015                           | (21) EP14727760.2                            |
| WASTE HEAT RECOVERY SYSTEM           | (33) Japan                                | (47) 07.07.2021                              |
| (73) Scania CV AB                    | (51) B60W 30/00                           | (87) EP2014060492                            |
| (72) JOHANSSON, Björn                | B62D 15/02                                | 31.12.2014                                   |
| HÖCKERDAL, Erik                      | G01S 13/72                                | (22) 22.05.2014                              |
| BLOM, Ola                            | G08G 1/00                                 | (54) PREDICTION OF A DRIVING PATH OF         |
| (31) 1650132                         | G08G 1/0967                               | A VEHICLE                                    |
| (32) 04.02.2016                      | B60W 60/00                                | (73) Bayerische Motoren Werke                |
| (33) Sweden                          | G01S 13/931                               | Aktiengesellschaft                           |
| (51) B60W 10/08                      | G05D 1/02                                 | (72) LIEBNER, Martin                         |
| F16H 63/42                           | (11) EP3659004                            | RUHHAMMER, Christian                         |
| B60W 50/038                          | (21) EP18919222.2                         | KLANNER, Felix                               |
| B60W 50/14                           | (47) 07.07.2021                           | KLÖDEN, Horst                                |
| (11) EP2785572                       | (87) CN2018087521                         | (31) 102013212359                            |
| (21) EP11876566.8                    | 21.11.2019                                | (32) 27.06.2013                              |
| (47) 07.07.2021                      | (22) 18.05.2018                           | (33) Germany                                 |
| (87) US2011063603                    | (54) DRIFTING CORRECTION                  | (51) B60W 30/14                              |
| 06.06.2013                           | BETWEEN PLANNING STAGE                    | (11) EP2918468                               |
| (22) 06.12.2011                      | AND CONTROLLING STAGE OF                  | (21) EP14003894.4                            |
| (54) SYSTEMS AND METHODS FOR         | OPERATING AUTONOMOUS DRIVING              | (47) 14.07.2021                              |
| DETERMINING SPEED CONTROL            | VEHICLES                                  | (22) 19.11.2014                              |
| MANAGEMENT SETTINGS                  | (73) Baidu.com Times Technology (Beijing) | (54) Method for adapting at least one target |
| (73) Paccar Inc                      | Co., Ltd.                                 | speed in a motor vehicle speed control       |
| (72) SLATON, Zachary                 | Baidu USA LLC                             | and driver assistance system                 |
| JOHNSON, Erik S.                     | (72) ZHU, Fan                             | (73) MAN Truck & Bus SE                      |
| HAMPSON, Richard                     | XU, Xin                                   | (72) Weller, Ralf                            |
| (31) 201161566556 P                  | KONG, Qi                                  | Resch, Christoph                             |
| (32) 02.12.2011                      | PAN, Yuchang                              | (31) 102014003537                            |
| (33) United States of America        | JIANG, Feiyi                              | (32) 12.03.2014                              |
| (51) B60W 10/16                      | ZHANG, Liangliang                         | (33) Germany                                 |
| B60W 10/184                          | TAO, Jiaming                              | (51) B60W 30/14                              |
| B60W 30/18                           | FAN, Haoyang                              | B60W 30/18                                   |
| B60W 30/186                          | JIANG, Hui                                | (11) EP3653459                               |
| (11) EP3096994                       | (51) B60W 30/06                           | (21) EP18206480.8                            |
| (21) EP14805545.2                    | (11) EP3524484                            | (47) 14.07.2021                              |
| (47) 07.07.2021                      | (21) EP16918267.2                         | (22) 15.11.2018                              |
| (87) EP2014075603                    | (47) 14.07.2021                           | (54) VEHICLE SAFE STOP                       |

|                                   |                                             |                                     |
|-----------------------------------|---------------------------------------------|-------------------------------------|
| (73) Volvo Car Corporation        | (11) EP3144197                              | (32) 07.04.2016                     |
| (72) JONASSON, Mats               | (21) EP16186269.3                           | (33) Japan                          |
| BROSTRÖM, Fredrik                 | (47) 14.07.2021                             |                                     |
| (51) B60W 30/14                   | (22) 30.08.2016                             | (51) B61C 17/00                     |
| G05D 1/02                         | (54) METHOD FOR AUTOMATICALLY               | B61D 37/00                          |
| (11) EP3220226                    | ADAPTING ACCELERATION IN A                  | (11) EP3339129                      |
| (21) EP17157730.7                 | MOTOR VEHICLE                               | (21) EP16206383.8                   |
| (47) 14.07.2021                   | (73) Ford Global Technologies, LLC          | (47) 07.07.2021                     |
| (22) 23.02.2017                   | (72) Ediger, Andreas                        | (22) 22.12.2016                     |
| (54) AUTOMATED VEHICLE HAVING     | Bäcker, Benjamin                            | (54) RAIL VEHICLE AND METHOD OF     |
| OPTIMIZED DRIVING SPEED           | Rosenberg, Stephanie                        | OPERATING A RAIL VEHICLE            |
| PROFILES                          | Strauch, Manuel                             | (73) Bombardier Transportation GmbH |
| (73) VOLKSWAGEN                   | Mukkala, Benjamin Carl                      | (72) Vedholm, Jonas                 |
| AKTIENGESELLSCHAFT                | Mills, Aaron L.                             |                                     |
| Audi AG                           | (31) 102015217577                           | (51) B61D 17/02                     |
| (72) KAUSHIK, Raghu               | (32) 15.09.2015                             | B61D 19/00                          |
| (31) 201615069502                 | (33) Germany                                | B61D 19/02                          |
| (32) 14.03.2016                   | (51) B60W 50/02                             | (11) EP3655302                      |
| (33) United States of America     | B60W 50/029                                 | (21) EP18769053.2                   |
| (51) B60W 30/16                   | (11) EP3242822                              | (47) 07.07.2021                     |
| (11) EP2817190                    | (21) EP15825612.3                           | (87) EP2018072864                   |
| (21) EP13705461.5                 | (47) 14.07.2021                             | 28.03.2019                          |
| (47) 07.07.2021                   | (87) FR2015053386                           | (22) 24.08.2018                     |
| (87) EP2013053384                 | 14.07.2016                                  | (54) DOOR SEAL FOR A RAIL VEHICLE   |
| 29.08.2013                        | (22) 09.12.2015                             | (73) Siemens Mobility GmbH          |
| (22) 20.02.2013                   | (54) METHOD AND DEVICE FOR                  | (72) RODRIGUEZ AHLERT, Carlos-Jose  |
| (54) SPEED CONTROL METHOD AND     | DETECTING A MALFUNCTION OF A                | RÜTER, Arnd                         |
| SYSTEM                            | VEHICLE ACCELERATOR PEDAL, BY               | (31) 102017216576                   |
| (73) Jaguar Land Rover Limited    | VERIFYING THE USE OF THE CLUTCH             | (32) 19.09.2017                     |
| (72) FAIRGRIEVE, Andrew           | PEDAL                                       | (33) Germany                        |
| KELLY, James                      | (73) PSA Automobiles SA                     | (51) B61D 19/02                     |
| (31) 201202878                    | (72) CAMP, Stéphane                         | (11) EP3541678                      |
| (32) 20.02.2012                   | THENEGAL, Cécile                            | (21) EP17790673.2                   |
| (33) United Kingdom               | LA TOUR, Coralie                            | (47) 07.07.2021                     |
| (51) B60W 40/04                   | (31) 1550011                                | (87) EP2017001227                   |
| G08G 1/01                         | (32) 05.01.2015                             | 24.05.2018                          |
| G08G 1/16                         | (33) France                                 | (22) 18.10.2017                     |
| B60W 30/18                        | (51) B60W 50/02                             | (54) DOOR MODULE FOR ARRANGING      |
| (11) EP3176046                    | G06F 21/55                                  | IN A DOOR OPENING OF A WAGON        |
| (21) EP16197937.2                 | G06F 21/74                                  | BODY OF A VEHICLE                   |
| (47) 14.07.2021                   | (11) EP3523169                              | (73) Knorr-Bremse Gesellschaft mit  |
| (22) 09.11.2016                   | (21) EP16918213.6                           | beschränkter Haftung                |
| (54) METHOD AND DEVICE IN A MOTOR | (47) 14.07.2021                             | (72) HÖRENDSBERGER, Christian       |
| VEHICLE FOR AUTOMATED DRIVING     | (87) IL2016051092                           | MAIR, Andreas                       |
| (73) VOLKSWAGEN                   | 12.04.2018                                  | ALLMER, Christian                   |
| AKTIENGESELLSCHAFT                | (22) 06.10.2016                             | (31) 102016013797                   |
| (72) Perdomo Lopez, David         | (54) SYSTEMS AND METHODS FOR                | (32) 21.11.2016                     |
| Jördens, Christian                | HANDLING A VEHICLE ECU                      | (33) Germany                        |
| Junge, Lutz                       | MALFUNCTION                                 | (51) B61D 27/00                     |
| Darms, Michael                    | (73) Red Bend Ltd.                          | (11) EP3507163                      |
| (31) 102015224338                 | (72) RAVE, Micha                            | (21) EP17791960.2                   |
| (32) 04.12.2015                   | EILAM TZOREFF, Tali                         | (47) 14.07.2021                     |
| (33) Germany                      | (51) B61B 13/00                             | (87) EP2017075816                   |
| (51) B60W 40/06                   | B62D 21/14                                  | 03.05.2018                          |
| (11) EP2942253                    | B62D 39/00                                  | (22) 10.10.2017                     |
| (21) EP15001314.2                 | B65G 35/00                                  | (54) AIR-CONDITIONING DUCT AND      |
| (47) 07.07.2021                   | B66C 19/00                                  | PASSENGER TRANSPORT VEHICLE         |
| (22) 04.05.2015                   | B66F 9/14                                   | EQUIPPED THEREWITH                  |
| (54) MOTOR VEHICLE                | (11) EP3441329                              | (73) Siemens Mobility GmbH          |
| (73) AUDI AG                      | (21) EP17779149.8                           | (72) CIFTCI, Behcet                 |
| (72) Schuder, Claudia             | (47) 07.07.2021                             | KASAP, Irfan                        |
| Popken, Markus                    | (87) JP2017014144                           | (31) 102016221410                   |
| (31) 102014006546                 | 12.10.2017                                  | (32) 31.10.2016                     |
| (32) 06.05.2014                   | (22) 04.04.2017                             | (33) Germany                        |
| (33) Germany                      | (54) TRAVELING CARRIAGE                     | (51) B61F 3/12                      |
| (51) B60W 50/00                   | (73) Atsumi Real Estate & Corporation, Inc. | B61F 5/04                           |
| B60W 30/16                        | (72) ATSUMI Kazuya                          | B61F 5/06                           |
|                                   | (31) 2016077184                             | B61F 5/12                           |
|                                   |                                             | B61F 5/16                           |

|                                            |                                       |                                   |
|--------------------------------------------|---------------------------------------|-----------------------------------|
| B61F 5/22                                  | (47) 07.07.2021                       | (33) China                        |
| B61F 5/50                                  | (87) IB2018053223                     | (51) B62B 3/06                    |
| (11) EP3459809                             | 15.11.2018                            | B62B 5/06                         |
| (21) EP17802067.3                          | (22) 09.05.2018                       | (11) EP3360754                    |
| (47) 07.07.2021                            | (54) SYSTEM AND METHOD FOR            | (21) EP17157407.2                 |
| (87) CN2017084303                          | DETECTING AN ABNORMAL GAIT            | (47) 07.07.2021                   |
| 30.11.2017                                 | CONDITION OF A RAILWAY VEHICLE        | (22) 22.02.2017                   |
| (22) 15.05.2017                            | (73) Faiveley Transport Italia S.r.l. | (54) PALLET TRUCK HANDLE ASSEMBLY |
| (54) BOGIE SUSPENSION TRACTION             | (72) TIONE, Roberto                   | (73) EP Equipment Co., Ltd.       |
| DEVICE FOR USE IN LOW-FLOOR                | MITTINO, Maurizio                     | (72) Zheng, Wang                  |
| ARTICULATED RAIL VEHICLE                   | (31) 201700050006                     | Yanfeng, Yang                     |
| (73) CRRG Qingdao Sifang Co., Ltd.         | (32) 09.05.2017                       | Jinsong, Cao                      |
| (72) ZHANG, Huijie                         | (33) Italy                            | (31) 201715429328                 |
| ZHOU, Yeming                               | (51) B61K 9/12                        | (32) 10.02.2017                   |
| ZHOU, Jinming                              | (11) EP3206933                        | (33) United States of America     |
| ZHOU, Pingyu                               | (21) EP15754139.2                     | (51) B62B 3/14                    |
| WANG, Shi                                  | (47) 14.07.2021                       | B62B 5/00                         |
| LIU, Yuwen                                 | (87) EP2015068537                     | B62B 5/06                         |
| (31) 201610340521                          | 21.04.2016                            | B65D 19/42                        |
| 201610344679                               | (22) 12.08.2015                       | (11) EP3640115                    |
| 201620473748 U                             | (54) STATE DIAGNOSIS OF RAIL VEHICLE  | (21) EP18201388.8                 |
| (32) 21.05.2016                            | WHEELS                                | (47) 07.07.2021                   |
| 21.05.2016                                 | (73) Siemens Mobility Austria GmbH    | (22) 19.10.2018                   |
| 21.05.2016                                 | (72) KÄMPFER, Björn                   | (54) ROLLER PALLET                |
| (33) China                                 | WEBER, Franz-Josef                    | (73) FEIL rolltainer GmbH         |
| China                                      | (31) 507422014                        | (72) Waldemar, Biehl              |
| China                                      | (32) 16.10.2014                       | (51) B62D 1/02                    |
| (51) B61F 5/52                             | (33) Austria                          | B62D 15/02                        |
| (11) EP2669138                             | (51) B61L 1/06                        | G06T 7/73                         |
| (21) EP12170083.5                          | B61L 25/02                            | (11) EP3488419                    |
| (47) 07.07.2021                            | B61L 27/00                            | (21) EP17726257.3                 |
| (22) 30.05.2012                            | (11) EP3281840                        | (47) 07.07.2021                   |
| (54) Running gear frame for a rail vehicle | (21) EP17186360.8                     | (87) EP2017062461                 |
| (73) Bombardier Transportation GmbH        | (47) 07.07.2021                       | 25.01.2018                        |
| (72) Zanutti, Cedric                       | (22) 03.09.2010                       | (22) 23.05.2017                   |
| (51) B61G 5/10                             | (54) METHOD FOR MONITORING            | (54) DRIVING ASSISTANCE METHOD,   |
| (11) EP3608196                             | COMPONENTS OF A RAILWAY               | DRIVING ASSISTANCE SYSTEM, AND    |
| (21) EP19180885.6                          | SYSTEM                                | VEHICLE                           |
| (47) 14.07.2021                            | (73) Siemens Mobility Limited         | (73) Robert Bosch GmbH            |
| (22) 18.06.2019                            | (72) Chadwick, Simon                  | (72) ANKA, Laszlo                 |
| (54) COUPLING WITH AN ELECTRICAL           | Chapman, Mike                         | SZABO, Vilmos                     |
| COUPLING FOR COUPLING TWO                  | Glover, Mark                          | (31) 102016213495                 |
| RAILWAY VEHICLES                           | McQuillan, James                      | (32) 22.07.2016                   |
| (73) Faiveley Transport Schwab AG          | Priest, Ian                           | (33) Germany                      |
| (72) FASSBIND, Mike                        | (31) 0915322                          | (51) B62D 1/16                    |
| (31) 9692018                               | (32) 03.09.2009                       | B62D 1/20                         |
| (32) 08.08.2018                            | (33) United Kingdom                   | F16C 3/035                        |
| (33) Switzerland                           | (51) B61L 27/00                       | F16C 33/38                        |
| (51) B61G 11/16                            | (11) EP3598701                        | (11) EP3568331                    |
| (11) EP3630576                             | (21) EP18911321.0                     | (21) EP18701275.2                 |
| (21) EP18726971.7                          | (47) 07.07.2021                       | (47) 14.07.2021                   |
| (47) 14.07.2021                            | (87) CN2018089470                     | (87) EP2018050712                 |
| (87) EP2018063420                          | 21.11.2019                            | 19.07.2018                        |
| 29.11.2018                                 | (22) 01.06.2018                       | (22) 12.01.2018                   |
| (22) 22.05.2018                            | (54) METHOD AND SYSTEM FOR            | (54) STEERING SHAFT FOR A MOTOR   |
| (54) A DEVICE DISSIPATING ENERGY OF        | PROCESSING CRITICAL LOGIC STATE       | VEHICLE                           |
| RAIL CAR COLLISIONS                        | (73) CRSC RESEARCH & DESIGN           | (73) thyssenkrupp Presta AG       |
| (73) AXSTONE Spółka Akcyjna                | INSTITUTE GROUP CO., LTD.             | thyssenkrupp AG                   |
| (72) KOCHMANSKI, Jan                       | (72) WANG, Li jun                     | (72) SCHMIDT, René Marco          |
| KUKULSKI, Jan                              | WEI, Feng                             | (31) 102017200578                 |
| WASILEWSKI, Leszek                         | LIN, Feng                             | (32) 16.01.2017                   |
| ZURAWSKI, Grzegorz                         | LIU, Kenan                            | (33) Germany                      |
| (31) 42167517                              | CHEN, Jianxin                         | (51) B62D 1/16                    |
| (32) 22.05.2017                            | ZHAO, Guimin                          | F16C 17/00                        |
| (33) Poland                                | WANG, Meihong                         | F16C 19/20                        |
| (51) B61K 9/12                             | LIU, Jun                              | F16C 19/40                        |
| (11) EP3621866                             | (31) 201810472241                     | F16C 25/08                        |
| (21) EP18728963.2                          | (32) 17.05.2018                       |                                   |



|                                  |                                       |                                              |
|----------------------------------|---------------------------------------|----------------------------------------------|
| F16C 27/06                       | (54) STEERING COLUMN                  | B62D 9/00                                    |
| F16C 33/374                      | (73) Robert Bosch Automotive Steering | (11) EP3611076                               |
| F16C 33/38                       | Vendôme                               | (21) EP19191381.3                            |
| F16C 33/46                       | (72) THEBAULT, Stephane               | (47) 07.07.2021                              |
| F16C 33/58                       | GENET, Nicolas                        | (22) 13.08.2019                              |
| (11) EP3532741                   | PATA, Christophe                      | (54) STEERING SYSTEM                         |
| (21) EP17787414.6                | RENARD, Jérémie                       | (73) Toyota Jidosha Kabushiki Kaisha         |
| (47) 14.07.2021                  | MOULYS, Benjamin                      | (72) YAMASHITA, Masaharu                     |
| (87) EP2017076984                | DE WEER, Alexis                       | KUBOTA, Shoji                                |
| 03.05.2018                       | (31) 1763269                          | OKUDA, Masataka                              |
| (22) 23.10.2017                  | (32) 27.12.2017                       | YAMASHITA, Yosuke                            |
| (54) STEERING COLUMN FOR A MOTOR | (33) France                           | (31) 2018152467                              |
| VEHICLE                          | (51) B62D 1/28                        | (32) 13.08.2018                              |
| (73) thyssenkrupp Presta AG      | B62D 5/04                             | (33) Japan                                   |
| thyssenkrupp AG                  | B62D 15/02                            | (51) B62D 5/04                               |
| (72) SULSER, Hansjoerg           | B60W 50/029                           | (11) EP3676158                               |
| GEIGER, Adrian Vincent           | (11) EP3634833                        | (21) EP17771992.9                            |
| WESELY, Alexander                | (21) EP18727230.7                     | (47) 07.07.2021                              |
| DOUCE, Audrey                    | (47) 07.07.2021                       | (87) EP2017071747                            |
| HERRMANN, Moritz                 | (87) EP2018063104                     | 07.03.2019                                   |
| ESAKK, Esther                    | 13.12.2018                            | (22) 30.08.2017                              |
| (31) 102016221078                | (22) 18.05.2018                       | (54) HARDWARE IMPLEMENTED MOTOR              |
| (32) 26.10.2016                  | (54) DEVICE AND METHOD FOR            | CONTROL AND PLATFORM FOR EPS                 |
| (33) Germany                     | AUTOPILOTING A VEHICLE                | (73) thyssenkrupp Presta AG                  |
| (51) B62D 1/181                  | (73) Volkswagen Aktiengesellschaft    | thyssenkrupp AG                              |
| F16C 19/06                       | (72) SWIETER, Ingo                    | (72) BALOGH, András                          |
| (11) EP3577010                   | (31) 102017209720                     | (51) B62D 5/04                               |
| (21) EP18704430.0                | (32) 08.06.2017                       | (11) EP3165423                               |
| (47) 14.07.2021                  | (33) Germany                          | (21) EP15193313.2                            |
| (87) EP2018051543                | (51) B62D 1/28                        | (47) 07.07.2021                              |
| 09.08.2018                       | B62D 6/00                             | (22) 05.11.2015                              |
| (22) 23.01.2018                  | B62D 15/02                            | (54) DRIVE UNIT FOR VEHICLE STEERING         |
| (54) MOTOR-ADJUSTABLE STEERING   | B62D 101/00                           | (73) Arvus Tecnologia Ltda.                  |
| COLUMN FOR A MOTOR VEHICLE       | B62D 119/00                           | (72) NASPOLINI, Adriano C.                   |
| (73) thyssenkrupp Presta AG      | B62D 137/00                           | VIEIRA, Jonatan                              |
| thyssenkrupp AG                  | (11) EP3495241                        | DE MELO, Daniel Fritzke Ferreira             |
| (72) SCHACHT, Arne               | (21) EP17836896.5                     | (51) B62D 5/04                               |
| SPECHT, Jean-Pierre              | (47) 07.07.2021                       | (11) EP3501943                               |
| HUBER, Sebastian                 | (87) JP2017027621                     | (21) EP18211048.6                            |
| (31) 102017201594                | 08.02.2018                            | (47) 07.07.2021                              |
| (32) 01.02.2017                  | (22) 31.07.2017                       | (22) 07.12.2018                              |
| (33) Germany                     | (54) ASSISTING FORCE CONTROL DEVICE   | (54) TORQUE OVERLAY STEERING                 |
| (51) B62D 1/184                  | AND ASSISTING FORCE CONTROL           | APPARATUS                                    |
| B62D 1/185                       | METHOD                                | (73) ZF Active Safety and Electronics US LLC |
| B62D 1/189                       | (73) Isuzu Motors Limited             | (72) Harter, Jr., Joseph E.                  |
| (11) EP3526101                   | (72) SUZUKI, Teruhiko                 | Boyle, Kevin E.                              |
| (21) EP17790699.7                | (31) 2016152057                       | (31) 201715851855                            |
| (47) 07.07.2021                  | (32) 02.08.2016                       | (32) 22.12.2017                              |
| (87) EP2017075843                | (33) Japan                            | (33) United States of America                |
| 19.04.2018                       | (51) B62D 5/00                        | (51) B62D 5/04                               |
| (22) 10.10.2017                  | B62D 5/04                             | B62D 6/08                                    |
| (54) STEERING COLUMN FOR A MOTOR | F16H 57/02                            | (11) EP3480079                               |
| VEHICLE, AND METHOD FOR          | F16H 57/021                           | (21) EP18199769.3                            |
| PRODUCING A STEERING COLUMN      | (11) EP3633236                        | (47) 07.07.2021                              |
| (73) thyssenkrupp Presta AG      | (21) EP19200676.5                     | (22) 11.10.2018                              |
| thyssenkrupp AG                  | (47) 14.07.2021                       | (54) METHOD AND DEVICE FOR                   |
| (72) HUBER, Sebastian            | (22) 01.10.2019                       | OPERATING A MOTOR VEHICLE                    |
| (31) 102016220140                | (54) POWER-STEERING REDUCTION         | FUNCTION                                     |
| (32) 14.10.2016                  | GEAR HOUSING COMPRISING               | (73) VOLKSWAGEN                              |
| (33) Germany                     | A NOTCH ON ONE SIDE OF AN             | AKTIENGESELLSCHAFT                           |
| (51) B62D 1/184                  | INTERMEDIATE DRILLING HOLE            | (72) Goering, Lars                           |
| B62D 1/189                       | (73) JTEKT Europe                     | Rüger, Tobias                                |
| (11) EP3749565                   | (72) SOHAR, Johann                    | Dobberphul, Timo                             |
| (21) EP18830460.4                | DURILLON, Arnaud                      | (31) 102017219467                            |
| (47) 14.07.2021                  | (31) 1859219                          | (32) 01.11.2017                              |
| (87) EP2018085856                | (32) 04.10.2018                       | (33) Germany                                 |
| 04.07.2019                       | (33) France                           | (51) B62D 5/04                               |
| (22) 19.12.2018                  | (51) B62D 5/00                        |                                              |

|                                                                                    |                                                                                                               |                                                                                  |
|------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| F16C 27/00                                                                         | 20160094241                                                                                                   | (33) France                                                                      |
| F16H 55/24                                                                         | (32) 17.05.2016                                                                                               | (51) B62D 15/02                                                                  |
| (11) EP3572301                                                                     | 25.07.2016                                                                                                    | (11) EP3539851                                                                   |
| (21) EP19175173.4                                                                  | (33) Korea (Republic)                                                                                         | (21) EP19162760.3                                                                |
| (47) 07.07.2021                                                                    | Korea (Republic)                                                                                              | (47) 07.07.2021                                                                  |
| (22) 17.05.2019                                                                    | (51) B62D 7/15                                                                                                | (22) 14.03.2019                                                                  |
| (54) REDUCER OF ELECTRIC POWER STEERING APPARATUS                                  | (11) EP3565755                                                                                                | (54) PARKING CONTROL DEVICE AND VEHICLE CONTROL DEVICE                           |
| (73) Mando Corporation                                                             | (21) EP18700225.8                                                                                             | (73) AISIN SEIKI KABUSHIKI KAISHA                                                |
| (72) KIM, Jong Han                                                                 | (47) 14.07.2021                                                                                               | (72) WATANABE, Hiroyuki                                                          |
| (31) 20180056840                                                                   | (87) GB2018050002                                                                                             | (31) 2018048557                                                                  |
| (32) 18.05.2018                                                                    | 12.07.2018                                                                                                    | (32) 15.03.2018                                                                  |
| (33) Korea (Republic)                                                              | (22) 02.01.2018                                                                                               | (33) Japan                                                                       |
| (51) B62D 5/04                                                                     | (54) APPARATUS AND METHOD FOR POSITION SENSING, CORRECTION AND MODE CHANGE IN A MULTI-AXLE STEERING SYSTEM    | (51) B62D 15/02                                                                  |
| H02P 23/03                                                                         | (73) Mecalac Construction Equipment UK Limited                                                                | G08C 17/00                                                                       |
| (11) EP2965419                                                                     | (72) SOKHI, Satpal                                                                                            | G05D 1/02                                                                        |
| (21) EP14716622.7                                                                  | WORTHINGTON, Carl                                                                                             | (11) EP3447598                                                                   |
| (47) 14.07.2021                                                                    | (31) 201700054                                                                                                | (21) EP18186899.3                                                                |
| (87) GB2014050645                                                                  | (32) 03.01.2017                                                                                               | (47) 07.07.2021                                                                  |
| 12.09.2014                                                                         | (33) United Kingdom                                                                                           | (22) 01.08.2018                                                                  |
| (22) 05.03.2014                                                                    | (51) B62D 9/00                                                                                                | (54) METHOD FOR OPERATING A MOTOR VEHICLE AND MOTOR VEHICLE                      |
| (54) MOTOR CONTROL FOR ELECTRIC POWER ASSISTED STEERING SYSTEMS                    | (11) EP3524493                                                                                                | (73) VOLKSWAGEN AKTIENGESELLSCHAFT                                               |
| (73) ZF Automotive UK Limited                                                      | (21) EP18155991.5                                                                                             | (72) Görg, Steffen                                                               |
| (72) DIXON, Christopher David                                                      | (47) 07.07.2021                                                                                               | (31) 102017214650                                                                |
| (31) 201304159                                                                     | (22) 09.02.2018                                                                                               | (32) 22.08.2017                                                                  |
| (32) 07.03.2013                                                                    | (54) STEERING METHOD FOR A VEHICLE                                                                            | (33) Germany                                                                     |
| (33) United Kingdom                                                                | (73) Volkswagen AG                                                                                            | (51) B62D 21/12                                                                  |
| (51) B62D 5/04                                                                     | Scania CV AB                                                                                                  | B62D 49/00                                                                       |
| H02P 29/02                                                                         | (72) Marx, Peter                                                                                              | B62D 63/02                                                                       |
| (11) EP3152096                                                                     | Kreis, Christopher                                                                                            | B60K 1/04                                                                        |
| (21) EP15725014.3                                                                  | Blumberg, Stefan                                                                                              | (11) EP3053813                                                                   |
| (47) 07.07.2021                                                                    | Rothhämel, Malte                                                                                              | (21) EP16154023.2                                                                |
| (87) EP2015061729                                                                  | (51) B62D 15/02                                                                                               | (47) 14.07.2021                                                                  |
| 10.12.2015                                                                         | (11) EP3565757                                                                                                | (22) 03.02.2016                                                                  |
| (22) 27.05.2015                                                                    | (21) EP17809287.0                                                                                             | (54) TOWING TRACTOR                                                              |
| (54) DEVICE FOR ACTUATING AND/OR MONITORING A BRUSHLESS DIRECT CURRENT MOTOR       | (47) 07.07.2021                                                                                               | (73) KABUSHIKI KAISHA TOYOTA JIDOSHOKKI                                          |
| (73) Conti Temic microelectronic GmbH                                              | (87) EP2017081539                                                                                             | (72) FUKATSU, Fumihito                                                           |
| (72) ARABACKYJ, Marc                                                               | 12.07.2018                                                                                                    | TAKENAKA, Takaaki                                                                |
| GÜRTLER, Thomas                                                                    | (22) 05.12.2017                                                                                               | (31) 2015021825                                                                  |
| HÜMMERICH, Thomas                                                                  | (54) CONTROL UNIT AND METHOD FOR PROVIDING A CORRECTION MOVE FOR A REVERSE PARKING ASSISTANCE SYSTEM          | (32) 06.02.2015                                                                  |
| KUHN, Mathias                                                                      | (73) Bayerische Motoren Werke Aktiengesellschaft                                                              | (33) Japan                                                                       |
| LOERINCZ, Robert Istvan                                                            | (72) EBNER, Adrian                                                                                            | (51) B62D 21/15                                                                  |
| PSCHORR, Andreas                                                                   | STRÖBEL, Michael                                                                                              | B62D 25/20                                                                       |
| (31) 102014210653                                                                  | (31) 102017200216                                                                                             | (11) EP3548363                                                                   |
| (32) 04.06.2014                                                                    | (32) 09.01.2017                                                                                               | (21) EP17829937.6                                                                |
| (33) Germany                                                                       | (33) Germany                                                                                                  | (47) 14.07.2021                                                                  |
| (51) B62D 6/10                                                                     | (51) B62D 15/02                                                                                               | (87) EP2017080915                                                                |
| G01D 11/24                                                                         | (11) EP3325328                                                                                                | 07.06.2018                                                                       |
| G01L 3/02                                                                          | (21) EP16730452.6                                                                                             | (22) 30.11.2017                                                                  |
| G01L 3/10                                                                          | (47) 07.07.2021                                                                                               | (54) BODY FOR A MOTOR VEHICLE HAVING A FLOOR ASSEMBLY, WHICH HAS A CENTER TUNNEL |
| G01L 5/12                                                                          | (87) FR2016051205                                                                                             | (73) Bayerische Motoren Werke Aktiengesellschaft                                 |
| G01L 5/22                                                                          | 24.11.2016                                                                                                    | (72) LANDECK, Bastian                                                            |
| (11) EP3460434                                                                     | (22) 20.05.2016                                                                                               | PELGER, Andreas                                                                  |
| (21) EP17799653.5                                                                  | (54) METHOD FOR INTERACTIVE CONTROL OF THE AUTOMATIC PARKING OF A MOTOR VEHICLE BY MEANS OF A MOBILE TERMINAL | TESCH, Florian                                                                   |
| (47) 07.07.2021                                                                    | (73) Valeo Comfort and Driving Assistance                                                                     | (31) 102016223749                                                                |
| (87) KR2017005116                                                                  | (72) GEHIN, Frédéric                                                                                          | (32) 30.11.2016                                                                  |
| 23.11.2017                                                                         | (31) 1554536                                                                                                  | (33) Germany                                                                     |
| (22) 17.05.2017                                                                    | (32) 20.05.2015                                                                                               | (51) B62D 21/15                                                                  |
| (54) TORQUE SENSOR AND TORQUE ANGLE SENSOR, AND STEERING APPARATUS COMPRISING SAME |                                                                                                               | B62D 33/06                                                                       |
| (73) LG Innotek Co., Ltd.                                                          |                                                                                                               | B62D 33/067                                                                      |
| (72) LEE, Chang Hwan                                                               |                                                                                                               | (11) EP3480084                                                                   |
| (31) 20160060078                                                                   |                                                                                                               |                                                                                  |

|                                          |                                          |                                           |
|------------------------------------------|------------------------------------------|-------------------------------------------|
| (21) EP18201421.7                        | (21) EP16199304.3                        | (33) Germany                              |
| (47) 14.07.2021                          | (47) 07.07.2021                          | (51) B62D 35/00                           |
| (22) 19.10.2018                          | (22) 17.11.2016                          | (11) EP3650322                            |
| (54) A CAB ASSEMBLY                      | (54) SECURING ARRANGEMENT IN A           | (21) EP19206823.7                         |
| (73) Ford Otomotiv Sanayi Anonim Sirketi | MOTOR VEHICLE                            | (47) 14.07.2021                           |
| (72) YILDIRIM, Ali Can                   | (73) Magna Steyr Fahrzeugtechnik AG & Co | (22) 04.11.2019                           |
| ARIK, Haluk                              | KG                                       | (54) BODY OF A ROAD VEHICLE FOR           |
| (31) 201717177                           | (72) GÖTZINGER, Bruno                    | TRANSPORTING GOODS PROVIDED               |
| (32) 03.11.2017                          | TAUCHER, Jürgen                          | WITH REAR DEFLECTORS                      |
| (33) Turkey                              | (51) B62D 29/04                          | (73) Jean Chereau SAS                     |
| (51) B62D 25/08                          | B62D 33/04                               | (72) LECUIR, Christophe                   |
| B62D 29/04                               | B62D 65/18                               | RENOUF, Gildas                            |
| (11) EP3350064                           | (11) EP3640124                           | (31) 1860193                              |
| (21) EP16756688.4                        | (21) EP19203272.0                        | (32) 06.11.2018                           |
| (47) 14.07.2021                          | (47) 07.07.2021                          | (33) France                               |
| (87) EP2016069926                        | (22) 15.10.2019                          | (51) B62D 51/02                           |
| 23.03.2017                               | (54) DEVICE FOR STABILIZING              | B62K 3/00                                 |
| (22) 24.08.2016                          | HONEYCOMB PANELS OF A BOX                | B62K 11/00                                |
| (54) SUPPORTING STRUCTURE FOR A          | SHAPED CARGO COMPARTMENT                 | (11) EP3412547                            |
| FRONT-END MODULE OF A MOTOR              | (73) AB Sjölund Construction             | (21) EP17755822.8                         |
| VEHICLE AND FRONT-END MODULE             | (72) SJÖLUND, Anders                     | (47) 07.07.2021                           |
| COMPRISING SAID SUPPORTING               | FRANZETTI EKEGREN, Petronella            | (87) CN2017074507                         |
| STRUCTURE                                | (31) 1851272                             | 31.08.2017                                |
| (73) Valeo Systemes Thermiques           | (32) 17.10.2018                          | (22) 23.02.2017                           |
| (72) ANDRE, Stephan                      | (33) Sweden                              | (54) HUMAN-MACHINE INTERACTION            |
| HERLEM, Jean-Paul                        | (51) B62D 31/02                          | SPORT VEHICLE                             |
| (31) 1558570                             | B62D 55/06                               | (73) Hangzhou Chic Intelligent Technology |
| (32) 14.09.2015                          | E01H 4/02                                | Co., Ltd                                  |
| (33) France                              | (11) EP3439943                           | (72) YING, Jiawei                         |
| (51) B62D 25/16                          | (21) EP17720225.6                        | (31) 201610101009                         |
| (11) EP3219587                           | (47) 14.07.2021                          | 201610101013                              |
| (21) EP17160962.1                        | (87) IB2017052020                        | 201610100947                              |
| (47) 14.07.2021                          | 12.10.2017                               | 201610101034                              |
| (22) 14.03.2017                          | (22) 07.04.2017                          | 201610100285                              |
| (54) MUDGUARD FOR VEHICLES               | (54) SNOW GROOMER                        | 201610101994                              |
| (73) Lago Accessori S.r.l.               | (73) PRINOTH S.p.A.                      | 201610100929                              |
| (72) LAGO, Fabio                         | (72) SPADONI, Riccardo                   | 201610101814                              |
| (31) UA20161715                          | KIRCHMAIR, Martin                        | 201610101007                              |
| (32) 16.03.2016                          | (31) UA201675552 U                       | 201610102364                              |
| (33) Italy                               | (32) 08.04.2016                          | 201610100998                              |
| (51) B62D 25/20                          | (33) Italy                               | (32) 24.02.2016                           |
| (11) EP3620355                           | (51) B62D 33/02                          | 24.02.2016                                |
| (21) EP19190544.7                        | B62D 33/04                               | 24.02.2016                                |
| (47) 14.07.2021                          | (11) EP3626589                           | 24.02.2016                                |
| (22) 07.08.2019                          | (21) EP19197650.5                        | 24.02.2016                                |
| (54) VEHICLE BODY STRUCTURE              | (47) 07.07.2021                          | 24.02.2016                                |
| (73) TOYOTA JIDOSHA KABUSHIKI KAISHA     | (22) 17.09.2019                          | 24.02.2016                                |
| (72) TANAKA, Motoki                      | (54) SIDE STANCHION FOR LOAD             | 24.02.2016                                |
| SAEKI, Koji                              | PLATFORMS OF VEHICLES                    | 24.02.2016                                |
| (31) 2018151255                          | (73) Kinnegrip AB                        | 24.02.2016                                |
| (32) 10.08.2018                          | (72) LINDSTRÖM, Stefan                   | 24.02.2016                                |
| (33) Japan                               | (31) 1851114                             | (33) China                                |
| (51) B62D 27/02                          | (32) 19.09.2018                          | China                                     |
| C09J 5/00                                | (33) Sweden                              | China                                     |
| (11) EP3098276                           | (51) B62D 33/06                          | China                                     |
| (21) EP16171515.6                        | (11) EP3575191                           | China                                     |
| (47) 07.07.2021                          | (21) EP19176143.6                        | China                                     |
| (22) 26.05.2016                          | (47) 07.07.2021                          | China                                     |
| (54) JOINING METHOD                      | (22) 23.05.2019                          | China                                     |
| (73) Volkswagen Aktiengesellschaft       | (54) CONNECTING ELEMENT FOR A            | China                                     |
| (72) Sülentrop, Sebastian                | DAMPING SYSTEM OF A DRIVER 'S            | China                                     |
| (31) 102015209685                        | CAB                                      | China                                     |
| (32) 27.05.2015                          | (73) CLAAS Tractor SAS                   | (51) B62D 53/08                           |
| (33) Germany                             | (72) Barentin, Magali                    | B62D 53/12                                |
| (51) B62D 27/06                          | Heilles, Yves                            | (11) EP3515797                            |
| F16B 7/18                                | Alquier, Eric                            | (21) EP17788292.5                         |
| (11) EP3324056                           | (31) 102018112776                        | (47) 07.07.2021                           |
|                                          | (32) 29.05.2018                          | (87) IB2017055675                         |

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|----------------------------------------------------------------------------------------------------------|----------------------------------------------------|------------------------------------------------------------------------------|
| 22.03.2018                                                                                               | (21) EP17868503.8                                  | E05B 83/18                                                                   |
| (22) 19.09.2017                                                                                          | (47) 07.07.2021                                    | B62J 9/00                                                                    |
| (54) INTERCONNECTION SYSTEM<br>BETWEEN A TRACTOR AND A<br>TRAILER                                        | (87) US2017047867<br>21.02.2019                    | B62J 9/23                                                                    |
| (73) Iveco S.p.A.                                                                                        | (22) 21.08.2017                                    | B62J 9/24                                                                    |
| (72) MARANDO, Francesco<br>VERGANO, Raffaele                                                             | (54) ELECTRONIC SECURITY SYSTEM<br>FOR BICYCLE     | B62J 9/30                                                                    |
| (31) 201600093812                                                                                        | (73) Linka Technologies LLC                        | B62J 11/19                                                                   |
| (32) 19.09.2016                                                                                          | Lake, Brendan                                      | (11) EP3647169                                                               |
| (33) Italy                                                                                               | Mohamed, Mohamed                                   | (21) EP18823457.9                                                            |
| (51) B62D 55/06                                                                                          | (72) MOHAMED, Mohamed                              | (47) 14.07.2021                                                              |
| B62D 55/112                                                                                              | LAKE, Brendan                                      | (87) JP2018019187<br>03.01.2019                                              |
| B62D 55/116                                                                                              | (31) 201715675790 P                                | (22) 17.05.2018                                                              |
| B62D 55/30                                                                                               | (32) 14.08.2017                                    | (54) MOTORCYCLE                                                              |
| E01H 4/02                                                                                                | (33) United States of America                      | (73) Honda Motor Co., Ltd.                                                   |
| (11) EP3205563                                                                                           | (51) B62H 5/00                                     | (72) KAWASUMI, Shinji                                                        |
| (21) EP16155191.6                                                                                        | B62H 5/20                                          | INOUE, Hayato                                                                |
| (47) 07.07.2021                                                                                          | B62K 19/30                                         | HORIUCHI, Tetsu                                                              |
| (22) 11.02.2016                                                                                          | G08G 1/00                                          | NAKAMURA, Takuro                                                             |
| (54) SNOW GROOMER FOR MAINTAINING<br>AND SHAPING SNOW TERRAIN                                            | H04L 29/08                                         | (31) 2017126916                                                              |
| (73) Kässbohrer Geländefahrzeug AG                                                                       | B60R 25/00                                         | (32) 29.06.2017                                                              |
| (72) Kuhn, Michael                                                                                       | H04W 4/02                                          | (33) Japan                                                                   |
| Junginger, Bernd                                                                                         | (11) EP3393896                                     | (51) B62H 5/00                                                               |
| (51) B62D 55/28                                                                                          | (21) EP16879447.7                                  | B62J 19/00                                                                   |
| (11) EP3393894                                                                                           | (47) 14.07.2021                                    | (11) EP3281850                                                               |
| (21) EP16879456.8                                                                                        | (87) NO2016050266<br>29.06.2017                    | (21) EP17186013.3                                                            |
| (47) 07.07.2021                                                                                          | (22) 21.12.2016                                    | (47) 14.07.2021                                                              |
| (87) NZ2016050210<br>29.06.2017                                                                          | (54) TRACKING UNIT FOR A HUMAN-<br>POWERED VEHICLE | (22) 11.08.2017                                                              |
| (22) 23.12.2016                                                                                          | (73) Bikefinder AS                                 | (54) DEVICE FOR ACCESS PROTECTION<br>FOR A TWO WHEELED VEHICLE AND<br>SYSTEM |
| (54) A DEVICE TO ENHANCE THE<br>TRACTION OF A TRACKED VEHICLE                                            | (72) ØLMHEIM, Ole, Martin<br>BRODAHL, Erik         | (73) Huber, Andreas                                                          |
| (73) JB Innovations Limited                                                                              | (31) 20151779                                      | (72) Huber, Andreas                                                          |
| (72) BURLING, John Menzies                                                                               | 20151781                                           | (31) 202016104436 U                                                          |
| (31) 15715612                                                                                            | (32) 22.12.2015                                    | (32) 11.08.2016                                                              |
| (32) 24.12.2015                                                                                          | 22.12.2015                                         | (33) Germany                                                                 |
| (33) New Zealand                                                                                         | (33) Norway                                        | (51) B62J 1/00                                                               |
| (51) B62H 5/00                                                                                           | (51) B62H 5/00                                     | B62J 1/26                                                                    |
| B62H 5/06                                                                                                | B62H 5/20                                          | (11) EP3501957                                                               |
| (11) EP3661836                                                                                           | B62K 19/40                                         | (21) EP18213320.7                                                            |
| (21) EP18748908.3                                                                                        | G08G 1/00                                          | (47) 14.07.2021                                                              |
| (47) 14.07.2021                                                                                          | H04L 29/08                                         | (22) 18.12.2018                                                              |
| (87) EP2018070695<br>07.02.2019                                                                          | B60R 25/00                                         | (54) BICYCLE SADDLE WITH MULTI-<br>DENSITY ZONES                             |
| (22) 31.07.2018                                                                                          | H04W 4/02                                          | (73) Specialized Bicycle Components, Inc.                                    |
| (54) DEVICE FOR LOCKING A CYCLE,<br>CYCLE COMPRISING SUCH A DEVICE,<br>SYSTEM COMPRISING SUCH A<br>CYCLE | H04W 4/38                                          | (72) Pruitt, Andy                                                            |
| (73) Smoove                                                                                              | (11) EP3393895                                     | Koehn, Jacqueline                                                            |
| (72) MERCAT, Denis                                                                                       | (21) EP16879446.9                                  | Walton, Jason                                                                |
| PRAQUIN, Gaël                                                                                            | (47) 14.07.2021                                    | (31) 201715849290                                                            |
| (31) 1757387                                                                                             | (87) NO2016050264<br>29.06.2017                    | (32) 20.12.2017                                                              |
| (32) 01.08.2017                                                                                          | (22) 21.12.2016                                    | (33) United States of America                                                |
| (33) France                                                                                              | (54) TRACKING UNIT FOR A HUMAN-<br>POWERED VEHICLE | (51) B62J 1/14                                                               |
| (51) B62H 5/00                                                                                           | (73) Bikefinder AS                                 | B62J 1/16                                                                    |
| B62H 5/14                                                                                                | (72) ØLMHEIM, Ole Martin                           | B62K 19/30                                                                   |
| B62H 5/20                                                                                                | BRODAHL, Erik                                      | B62J 6/03                                                                    |
| E05B 45/00                                                                                               | (31) 20151780                                      | (11) EP3636522                                                               |
| E05B 71/00                                                                                               | (32) 22.12.2015                                    | (21) EP19197184.5                                                            |
| H04L 29/06                                                                                               | (33) Norway                                        | (47) 14.07.2021                                                              |
| B60R 25/102                                                                                              | (51) B62H 5/00                                     | (22) 13.09.2019                                                              |
| B60R 25/40                                                                                               | B62J 7/00                                          | (54) TUBE FOR A BICYCLE                                                      |
| G07C 9/00                                                                                                | B62J 7/04                                          | (73) Puretek Manufacturing Co., Ltd.                                         |
| H04W 12/06                                                                                               | B62J 23/00                                         | (72) LO, Kuang-Yen                                                           |
| (11) EP3469173                                                                                           | E05B 49/00                                         | MUELLER, Jonas                                                               |
|                                                                                                          | E05B 83/00                                         | (31) 107135363                                                               |
|                                                                                                          | E05B 83/16                                         | (32) 08.10.2018                                                              |
|                                                                                                          |                                                    | (33) Taiwan, Province of China                                               |
|                                                                                                          |                                                    | (51) B62J 23/00                                                              |
|                                                                                                          |                                                    | B62K 23/04                                                                   |
|                                                                                                          |                                                    | (11) EP3546329                                                               |

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|---------------------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------------|
| (21) EP19159825.9                                                   | (47) 14.07.2021                                                 | (72) SCHUCHNIGG, Lukas                                           |
| (47) 14.07.2021                                                     | (87) IB2017050492                                               | (31) 202018001990 U                                              |
| (22) 27.02.2019                                                     | 03.08.2017                                                      | (32) 18.04.2018                                                  |
| (54) THROTTLE OPENING DETECTING APPARATUS FOR SADDLE RIDING VEHICLE | (22) 30.01.2017                                                 | (33) Germany                                                     |
| (73) Honda Motor Co., Ltd.                                          | (54) THREE-WHEELED STRADDLE-SEAT VEHICLE                        | (51) B62K 23/02                                                  |
| (72) NISHI, Atsushi                                                 | (73) Bombardier Recreational Products Inc.                      | B62K 23/06                                                       |
| (31) 2018045267                                                     | (72) LABERGE, Nicolas                                           | B62L 3/02                                                        |
| (32) 13.03.2018                                                     | MALTAIS-LAROCHE, Emile                                          | B62M 25/04                                                       |
| (33) Japan                                                          | HEBERT, Sebastien                                               | (11) EP3156313                                                   |
| (51) B62J 27/20                                                     | COTE, Andre                                                     | (21) EP16193394.0                                                |
| (11) EP3674191                                                      | RIUS, Emmanuel                                                  | (47) 07.07.2021                                                  |
| (21) EP18849257.3                                                   | (31) 201662289155 P                                             | (22) 11.10.2016                                                  |
| (47) 14.07.2021                                                     | (32) 29.01.2016                                                 | (54) HANDLEBAR FASTENER FOR A SWITCHGEAR UNIT                    |
| (87) JP2018015448                                                   | (33) United States of America                                   | (73) Gustav Magenwirth GmbH & Co. KG                             |
| 28.02.2019                                                          | (51) B62K 11/04                                                 | (72) Ruopp, Michael                                              |
| (22) 12.04.2018                                                     | B62K 19/28                                                      | Neutsch, Christian                                               |
| (54) AIR BAG DEVICE FOR SADDLE-TYPE VEHICLES                        | (11) EP3381781                                                  | (31) 102015220239                                                |
| (73) Honda Motor Co., Ltd.                                          | (21) EP18160845.6                                               | (32) 16.10.2015                                                  |
| (72) AIKYO Yutaka                                                   | (47) 14.07.2021                                                 | (33) Germany                                                     |
| SATO Takashi                                                        | (22) 09.03.2018                                                 | (51) B62K 23/04                                                  |
| (31) 2017160230                                                     | (54) BODY STRUCTURE OF SADDLE RIDING VEHICLE                    | (11) EP3498582                                                   |
| (32) 23.08.2017                                                     | (73) HONDA MOTOR CO., LTD.                                      | (21) EP18210959.5                                                |
| (33) Japan                                                          | (72) MATSUSHIMA, Satoshi                                        | (47) 07.07.2021                                                  |
| (51) B62J 35/00                                                     | (31) 2017061757                                                 | (22) 07.12.2018                                                  |
| B62K 11/04                                                          | (32) 27.03.2017                                                 | (54) THROTTLE GRIP DEVICE                                        |
| B62M 7/02                                                           | (33) Japan                                                      | (73) Asahi Denso Co., Ltd.                                       |
| F02B 33/44                                                          | (51) B62K 15/00                                                 | Yamaha Hatsudoki Kabushiki Kaisha                                |
| F02B 39/04                                                          | (11) EP3699073                                                  | (72) OSHIRO, Yukio                                               |
| F02M 35/16                                                          | (21) EP19158391.3                                               | KUMAZAWA, Takeo                                                  |
| F02M 37/14                                                          | (47) 14.07.2021                                                 | TANAKA, Tomoki                                                   |
| (11) EP3053816                                                      | (22) 20.02.2019                                                 | (31) 2017239166                                                  |
| (21) EP13894968.0                                                   | (54) FOLDABLE BICYCLE FRAME                                     | (32) 14.12.2017                                                  |
| (47) 14.07.2021                                                     | (73) Grzegorz, Olech                                            | (33) Japan                                                       |
| (87) JP2013005905                                                   | (72) Grzegorz, Olech                                            | (51) B62K 27/00                                                  |
| 09.04.2015                                                          | (51) B62K 19/04                                                 | (11) EP3676165                                                   |
| (22) 03.10.2013                                                     | B62K 19/30                                                      | (21) EP18799668.1                                                |
| (54) MOTORCYCLE INCORPORATING A SUPERCHARGER                        | B62K 19/40                                                      | (47) 14.07.2021                                                  |
| (73) KAWASAKI JUKOGYO KABUSHIKI KAISHA                              | B62M 6/40                                                       | (87) EP2018073549                                                |
| (72) ISHII, Hiroshi                                                 | B62M 6/90                                                       | 07.03.2019                                                       |
| SAEKI, Daisuke                                                      | (11) EP3237274                                                  | (22) 31.08.2018                                                  |
| YAMAMOTO, Tomo                                                      | (21) EP15816192.7                                               | (54) CONVERTIBLE BICYCLE TRAILER/ TRANSPORT UNIT                 |
| (51) B62K 3/00                                                      | (47) 07.07.2021                                                 | (73) Veadventures Limited                                        |
| B62K 15/00                                                          | (87) EP2015080996                                               | (72) ENGEL, Rebecca                                              |
| (11) EP3197767                                                      | 30.06.2016                                                      | VIEIRA, Luiz                                                     |
| (21) EP16762732.2                                                   | (22) 22.12.2015                                                 | (31) 201714030                                                   |
| (47) 07.07.2021                                                     | (54) BICYCLE FRAME AND ELECTRIC BICYCLE WITH ENERGY ACCUMULATOR | (32) 01.09.2017                                                  |
| (87) EP2016067688                                                   | (73) Biketec AG                                                 | (33) United Kingdom                                              |
| 02.02.2017                                                          | (72) DURDEVIC, Ivica                                            | (51) B62M 6/45                                                   |
| (22) 25.07.2016                                                     | STUDER, Lukas Beat                                              | B62M 6/60                                                        |
| (54) COLLAPSIBLE SCOOTER                                            | SUTER, Philipp Walter                                           | (11) EP3064423                                                   |
| (73) D&E Company Produktions- und Betriebs GmbH                     | WÖLK, Timo                                                      | (21) EP16154851.6                                                |
| (72) BERNDORFER, Wolfgang                                           | AFZAL, Omar                                                     | (47) 14.07.2021                                                  |
| (31) 201520551441 U                                                 | (31) 102014226828                                               | (22) 09.02.2016                                                  |
| 592016                                                              | (32) 22.12.2014                                                 | (54) HUMAN-MACHINE INTERFACE SYSTEM FOR A PEDAL-ASSISTED BICYCLE |
| (32) 25.07.2015                                                     | (33) Germany                                                    | (73) ZEHUS S.p.A.                                                |
| 08.02.2016                                                          | (51) B62K 21/18                                                 | (72) Corno, Matteo                                               |
| (33) China                                                          | B62K 21/22                                                      | Savaresi, Sergio Matteo                                          |
| Austria                                                             | (11) EP3560809                                                  | Berretta, Daniele                                                |
| (51) B62K 5/025                                                     | (21) EP19168777.1                                               | Lisanti, Paolo                                                   |
| B62K 5/027                                                          | (47) 07.07.2021                                                 | (31) UB20150006                                                  |
| (11) EP3408165                                                      | (22) 11.04.2019                                                 | (32) 10.02.2015                                                  |
| (21) EP17743829.8                                                   | (54) HANDLEBAR STEM CONNECTION DEVICE AND BICYCLE ELEMENT       | (33) Italy                                                       |
|                                                                     | (73) Canyon Bicycles GmbH                                       | (51) B62M 6/60                                                   |

|                                               |                                         |                                   |
|-----------------------------------------------|-----------------------------------------|-----------------------------------|
| (11) EP3548374                                | Toyota, Yuichi                          | (32) 07.10.2014                   |
| (21) EP17816967.8                             | (31) 2013073129                         | (33) Denmark                      |
| (47) 14.07.2021                               | (32) 29.03.2013                         |                                   |
| (87) FR2017053354                             | (33) Japan                              | (51) B63B 35/28                   |
| 14.06.2018                                    | (51) B63B 1/10                          | B63B 35/32                        |
| (22) 01.12.2017                               | B63B 27/16                              | C02F 1/14                         |
| (54) MOTOR BICYCLE                            | B63B 27/36                              | C02F 101/30                       |
| (73) MS Systemes                              | (11) EP3696074                          | C02F 103/08                       |
| (72) MERCIER, Adam                            | (21) EP19460014.4                       | (11) EP3649084                    |
| SUTEAU, Lucas                                 | (47) 14.07.2021                         | (21) EP18732088.2                 |
| (31) 1661953                                  | (22) 29.03.2019                         | (47) 14.07.2021                   |
| (32) 05.12.2016                               | (54) CATAMARAN TYPE VESSEL              | (87) EP2018066676                 |
| (33) France                                   | (73) Sunreef Venture S.A.               | 10.01.2019                        |
| (51) B62M 11/02                               | (72) Lashmann, Michal                   | (22) 21.06.2018                   |
| B60K 6/365                                    | (31) 42892319                           | (54) SYSTEM FOR POLLUTION CONTROL |
| B62M 6/20                                     | (32) 15.02.2019                         | OF AQUATIC ENVIRONMENTS           |
| B62M 6/40                                     | (33) Poland                             | (73) MATSYA                       |
| B62M 6/55                                     | (51) B63B 17/00                         | (72) FAYOLLET, Pierre-Edouard     |
| (11) EP3630592                                | B63B 27/14                              | MOULIN, Isabelle                  |
| (21) EP18727232.3                             | B63B 27/30                              | (31) 1756396                      |
| (47) 07.07.2021                               | B66C 19/00                              | (32) 06.07.2017                   |
| (87) EP2018063135                             | (11) EP3286070                          | (33) France                       |
| 29.11.2018                                    | (21) EP16731372.5                       | (51) B63B 35/44                   |
| (22) 18.05.2018                               | (47) 07.07.2021                         | E02D 7/06                         |
| (54) BICYCLE HAVING ELECTRIC DRIVE            | (87) NL2016050292                       | E02D 13/00                        |
| WITH POWER DISTRIBUTION                       | 27.10.2016                              | G01K 11/00                        |
| (73) Mahle International GmbH                 | (22) 25.04.2016                         | (11) EP3661842                    |
| (72) DÖPPNER, Enrico                          | (54) VESSEL AND BOOM CONSTRUCTION       | (21) EP18762010.9                 |
| MOCZKO, David                                 | (73) Safeway B.V.                       | (47) 07.07.2021                   |
| OPLOH, Amir                                   | (72) VAN AALST, Gerbrand August Wijnand | (87) EP2018070882                 |
| STOLL, Sebastian                              | (31) 2014696                            | 07.02.2019                        |
| WIRTH, Christian                              | (32) 23.04.2015                         | (22) 01.08.2018                   |
| (31) 102017208714                             | (33) Netherlands                        | (54) VESSEL                       |
| 102017215349                                  | (51) B63B 27/14                         | (73) Elmer, Karl-Heinz            |
| (32) 23.05.2017                               | (11) EP3461733                          | (72) Elmer, Karl-Heinz            |
| 01.09.2017                                    | (21) EP18196203.6                       | (31) 102017117552                 |
| (33) Germany                                  | (47) 14.07.2021                         | (32) 02.08.2017                   |
| Germany                                       | (22) 24.09.2018                         | (33) Germany                      |
| (51) B62M 11/02                               | (54) RETRACTABLE TELESCOPIC             | (51) B63B 35/66                   |
| B62M 6/55                                     | GANGWAY FOR GETTING ON AND/OR           | B63H 5/125                        |
| (11) EP3630591                                | GETTING OFF BOATS OF PERSONS            | B63H 5/15                         |
| (21) EP18726441.1                             | (73) B. FINANCIAL S.r.l.                | B63H 25/42                        |
| (47) 07.07.2021                               | (72) BESENZONI, Giorgio                 | (11) EP3523194                    |
| (87) EP2018063134                             | (31) 201700109126                       | (21) EP17790866.2                 |
| 29.11.2018                                    | (32) 29.09.2017                         | (47) 07.07.2021                   |
| (22) 18.05.2018                               | (33) Italy                              | (87) NL2017050656                 |
| (54) BICYCLE HAVING ELECTRIC DRIVE            | (51) B63B 27/32                         | 12.04.2018                        |
| WITH POWER DISTRIBUTION                       | B66D 3/00                               | (22) 05.10.2017                   |
| (73) Mahle International GmbH                 | B66D 3/02                               | (54) TUGBOAT HAVING AZIMUTHAL     |
| (72) DÖPPNER, Enrico                          | B67D 9/00                               | PROPELLING UNITS                  |
| OPLOH, Amir                                   | (11) EP3204324                          | (73) Rotortug Holding B.V.        |
| STOLL, Sebastian                              | (21) EP15766395.6                       | (72) KOOREN, Antonie, Marius      |
| WIRTH, Christian                              | (47) 14.07.2021                         | (31) 2017577                      |
| (31) 102017208714                             | (87) DK2015050278                       | (32) 05.10.2016                   |
| 102017215349                                  | 14.04.2016                              | (33) Netherlands                  |
| (32) 23.05.2017                               | (22) 16.09.2015                         | (51) B63B 49/00                   |
| 01.09.2017                                    | (54) WIND TURBINE TOWER AND             | B63J 99/00                        |
| (33) Germany                                  | APPARATUS AND METHOD FOR                | B63B 79/10                        |
| Germany                                       | REMOVING EQUIPMENT PARTS FROM           | B63H 9/04                         |
| (51) B62M 11/02                               | A PLATFORM OF A WIND TURBINE            | B63H 9/06                         |
| B62M 6/55                                     | GENERATOR                               | (11) EP3411292                    |
| (11) EP2783972                                | (73) Vestas Offshore Wind A/S           | (21) EP17705019.2                 |
| (21) EP14161383.6                             | (72) CHRISTENSEN, Kim                   | (47) 14.07.2021                   |
| (47) 14.07.2021                               | URSELL-SMITH, Mark                      | (87) EP2017051093                 |
| (22) 25.03.2014                               | NORDLYNG, Peter                         | 10.08.2017                        |
| (54) Driving unit and electric assist bicycle | NAKAYAMA, Ken                           | (22) 19.01.2017                   |
| (73) Yamaha Hatsudoki Kabushiki Kaisha        | HANSEN, Morten Frost                    | (54) SENSOR APPARATUS AND         |
| (72) Ishikawa, Noriyasu                       | (31) 201470621                          | ASSOCIATED SYSTEM                 |
|                                               |                                         | (73) Tapp, Rachael                |

|                                           |                                        |                                   |
|-------------------------------------------|----------------------------------------|-----------------------------------|
| (72) Tapp, Rachael                        | (73) Oceaneering International Inc.    | (21) EP17156818.1                 |
| (31) 201602141                            | (72) COUCH, Jack                       | (47) 07.07.2021                   |
| (32) 05.02.2016                           | CASTON, Matthew James                  | (22) 20.02.2017                   |
| (33) United Kingdom                       | GEBHARDT, Kyle William                 | (54) BOAT STEERING CONTROL DEVICE |
| (51) B63B 49/00                           | HERMANN, Scott Edward                  | (73) Ultraflex Spa                |
| G01C 21/20                                | (31) 201562252454 P                    | (72) GAI, Marcella                |
| G01C 21/32                                | (32) 07.11.2015                        | TRALONGO, FEDERICO                |
| G08G 5/00                                 | (33) United States of America          | (31) UB20160875                   |
| (11) EP3647727                            | (51) B63G 8/12                         | (32) 19.02.2016                   |
| (21) EP19205571.3                         | B63G 13/02                             | (33) Italy                        |
| (47) 07.07.2021                           | B63H 21/32                             | (51) B64C 1/00                    |
| (22) 28.10.2019                           | (11) EP3209553                         | F04D 25/08                        |
| (54) SYSTEMS AND ASSOCIATED               | (21) EP15771151.6                      | H02K 1/18                         |
| METHODS FOR GENERATING                    | (47) 07.07.2021                        | H02K 5/10                         |
| NAVIGATION CHARTS AND                     | (87) EP2015072583                      | H02K 5/20                         |
| NAVIGABLE ROUTES IN AN OPEN               | 28.04.2016                             | H02K 7/08                         |
| ENVIRONMENT                               | (22) 30.09.2015                        | H02K 7/14                         |
| (73) Navico Holding AS                    | (54) SUBMARINE                         | H02K 9/06                         |
| (72) FALLRO, Kristian                     | (73) thyssenkrupp Marine Systems GmbH  | H02K 21/22                        |
| BOROVAC, Amir                             | (72) HÖVELMANN, Norbert                | H05K 7/20                         |
| SEVILLANO, Jorge                          | SACHAU, Delf                           | H02K 11/33                        |
| (31) 201816175247                         | SIMANOWSKI, Kai                        | (11) EP3204291                    |
| (32) 30.10.2018                           | GRIEFNOW, Philip                       | (21) EP15874379.9                 |
| (33) United States of America             | (31) 102014221326                      | (47) 07.07.2021                   |
| (51) B63C 9/26                            | (32) 21.10.2014                        | (87) CN2015080529                 |
| (11) EP3577020                            | (33) Germany                           | 08.12.2016                        |
| (21) EP18703893.0                         | (51) B63H 1/18                         | (22) 01.06.2015                   |
| (47) 14.07.2021                           | F04B 11/00                             | (54) SYSTEM, KIT, AND METHOD FOR  |
| (87) EP2018000031                         | F15D 1/00                              | DISSIPATING HEAT GENERATED BY A   |
| 09.08.2018                                | F15B 21/04                             | MOTOR ASSEMBLY                    |
| (22) 24.01.2018                           | (11) EP3612443                         | (73) SZ DJI Technology Co., Ltd.  |
| (54) EXTENSIBLE LIFE-PRESERVING           | (21) EP18787468.0                      | (72) BEI, Shimeng                 |
| DEVICE                                    | (47) 14.07.2021                        | WU, Xumin                         |
| (73) Rivaroli, Claudio                    | (87) AU2018050361                      | YU, Qiang                         |
| (72) Rivaroli, Claudio                    | 25.10.2018                             | AO, Jiyuan                        |
| (31) 201700010263                         | (22) 20.04.2018                        | WU, Xiaolong                      |
| (32) 31.01.2017                           | (54) PREVENTION OF CAVITATION          | (51) B64C 1/14                    |
| (33) Italy                                | (73) Newsouth Innovations Pty Limited  | B64D 45/00                        |
| (51) B63C 11/16                           | Antony, John Joseph                    | H02G 3/08                         |
| (11) EP3647179                            | (72) PASHLEY, Richard Mark             | H05K 5/00                         |
| (21) EP19205582.0                         | ANTONY, John Joseph                    | (11) EP3345827                    |
| (47) 07.07.2021                           | TASEIDIFAR, Mojtaba                    | (21) EP17203034.8                 |
| (22) 28.10.2019                           | (31) 2017901468                        | (47) 07.07.2021                   |
| (54) FULL-FACE DIVING MASK                | (32) 21.04.2017                        | (22) 22.11.2017                   |
| (73) Bestway Inflatables & Material Corp. | (33) Australia                         | (54) SYSTEMS AND METHODS FOR      |
| (72) HUANG, Shuiyong                      | (51) B63H 5/08                         | CONTROLLING MOISTURE INGRESS      |
| WU, Bo                                    | B63H 25/02                             | IN AIRCRAFT SKIN MOUNTED          |
| LIU, Yuyan                                | B63H 25/06                             | ELECTRONICS                       |
| (31) 201821763012 U                       | B63H 25/24                             | (73) The Boeing Company           |
| (32) 29.10.2018                           | B63H 25/42                             | (72) PETERSEN, Robert M.          |
| (33) China                                | G05D 1/02                              | OLINGER, Heath Michael            |
| (51) B63C 11/52                           | (11) EP3549852                         | GRAYBILL, Robert Steven           |
| E02B 3/04                                 | (21) EP17875136.8                      | (31) 201715400449                 |
| E02B 5/08                                 | (47) 07.07.2021                        | (32) 06.01.2017                   |
| E04H 17/18                                | (87) JP2017043028                      | (33) United States of America     |
| E06B 7/086                                | 07.06.2018                             | (51) B64C 1/14                    |
| E06B 7/09                                 | (22) 30.11.2017                        | E05C 9/04                         |
| E06B 9/01                                 | (54) SHIP MANEUVERING SYSTEM, SHIP,    | E05C 9/08                         |
| E06B 9/04                                 | AND SHIP MANEUVERING METHOD            | E05B 79/20                        |
| E06B 9/26                                 | (73) Mitsui E&S Shipbuilding Co., Ltd. | E05B 83/38                        |
| F24F 13/15                                | (72) MURATA Koh                        | (11) EP3345826                    |
| (11) EP3371376                            | (31) 2016232223                        | (21) EP17154691.4                 |
| (21) EP16863165.3                         | (32) 30.11.2016                        | (47) 07.07.2021                   |
| (47) 14.07.2021                           | (33) Japan                             | (22) 03.02.2017                   |
| (87) US2016060827                         | (51) B63H 21/21                        | (54) MODULAR LATCH SYSTEM         |
| 11.05.2017                                | B63H 25/02                             | (73) Textron Innovations Inc.     |
| (22) 07.11.2016                           | B63H 25/06                             | (72) AMANTE, William A.           |
| (54) CURRENT SHIELD                       | (11) EP3208186                         | SIDDALINGAPPA, Arunkumar Koppa    |

|                                   |                                              |                                      |
|-----------------------------------|----------------------------------------------|--------------------------------------|
| (31) 201715401979                 | (47) 07.07.2021                              | 201916545472                         |
| (32) 09.01.2017                   | (22) 29.05.2019                              | 201916545498                         |
| (33) United States of America     | (54) A DUCT STRINGER                         | (32) 23.11.2018                      |
| (51) B64C 1/18                    | (73) Airbus Operations Limited               | 23.11.2018                           |
| B64D 13/08                        | (72) DOUGLAS, Paul                           | 20.08.2019                           |
| F24D 13/02                        | BRYANT, Anthony                              | 20.08.2019                           |
| (11) EP3569496                    | (31) 201810739                               | (33) United States of America        |
| (21) EP19184480.2                 | (32) 29.06.2018                              | United States of America             |
| (47) 14.07.2021                   | (33) United Kingdom                          | United States of America             |
| (22) 13.02.2017                   | (51) B64C 9/16                               | United States of America             |
| (54) HEATED AIRCRAFT FLOOR PANELS | B64C 13/40                                   | (51) B64C 11/44                      |
| (73) Goodrich Corporation         | B64C 13/42                                   | B64C 27/12                           |
| (72) OWENS, George                | B64C 13/50                                   | B64C 27/72                           |
| ROACH, Kevin E.                   | (11) EP3549857                               | B64C 39/02                           |
| MULLEN, James                     | (21) EP19166351.7                            | (11) EP3652069                       |
| SHEARER, Jon                      | (47) 14.07.2021                              | (21) EP18756267.3                    |
| TWISK, James V.                   | (22) 29.03.2019                              | (47) 14.07.2021                      |
| BRITTINGHAM, David L.             | (54) FLAP ACTUATOR SYSTEM                    | (87) FR2018000192                    |
| WILSON, Tom                       | (73) The Boeing Company                      | 17.01.2019                           |
| HU, Jin                           | (72) HUYNH, Neal V.                          | (22) 12.07.2018                      |
| VERONESI, William A.              | (31) 201815947595                            | (54) DEVICE FOR DIRECT CONTROL OF    |
| GURVICH, Mark R.                  | (32) 06.04.2018                              | BLADE BY ELECTROMECHANICAL           |
| WINESDOERFFER, Joseph             | (33) United States of America                | ACTUATOR                             |
| GESNER, Jason                     | (51) B64C 11/16                              | (73) Willinger, Yann Raymond Albert  |
| GIAMATI, Michael J.               | B64C 11/20                                   | (72) Willinger, Yann Raymond Albert  |
| (31) 201662294954 P               | B64C 27/473                                  | (31) 1700752                         |
| (32) 12.02.2016                   | (11) EP2660143                               | (32) 13.07.2017                      |
| (33) United States of America     | (21) EP12305484.3                            | (33) France                          |
| (51) B64C 1/30                    | (47) 07.07.2021                              | (51) B64C 13/00                      |
| B64C 39/02                        | (22) 30.04.2012                              | B64D 45/00                           |
| (11) EP3206947                    | (54) Propeller blade with lightweight insert | B64D 47/08                           |
| (21) EP15874388.0                 | and bulkheads                                | G01B 21/32                           |
| (47) 07.07.2021                   | (73) RATIER-FIGEAC                           | G01C 11/00                           |
| (87) CN2015080528                 | (72) Seminel, Bruno                          | G01C 11/12                           |
| 08.12.2016                        | Petallaz, Bruno                              | G01C 15/02                           |
| (22) 01.06.2015                   | (51) B64C 11/30                              | G01M 5/00                            |
| (54) SYSTEMS AND METHODS FOR      | B64C 11/38                                   | H04N 7/18                            |
| FOLDABLE ARMS                     | (11) EP3293109                               | (11) EP3306293                       |
| (73) SZ DJI Technology Co., Ltd.  | (21) EP17190710.8                            | (21) EP17195619.6                    |
| (72) WU, Xumin                    | (47) 07.07.2021                              | (47) 14.07.2021                      |
| WU, Xiaolong                      | (22) 12.09.2017                              | (22) 10.10.2017                      |
| LEE, Sungki                       | (54) PROPELLER BLADE ANGLE CONTROL           | (54) AIRCRAFT MONITORING SYSTEM      |
| AO, Jiyuan                        | SYSTEM                                       | (73) The Boeing Company              |
| FENG, Zhuang                      | (73) Pratt & Whitney Canada Corp.            | (72) GRIFFITHS, Robert C             |
| (51) B64C 1/36                    | (72) WADDLETON, David                        | VOTH, Mitchell D                     |
| B64D 15/12                        | (31) 201662393339 P                          | (31) 201615289477                    |
| H01B 7/00                         | 201715612522                                 | (32) 10.10.2016                      |
| H05B 3/02                         | (32) 12.09.2016                              | (33) United States of America        |
| (11) EP3466807                    | 02.06.2017                                   | (51) B64C 13/04                      |
| (21) EP18203404.1                 | (33) United States of America                | B64C 13/10                           |
| (47) 14.07.2021                   | United States of America                     | (11) EP3000726                       |
| (22) 03.06.2013                   | (51) B64C 11/30                              | (21) EP15186749.6                    |
| (54) LOW PROFILE PASS-THROUGH     | B64D 31/06                                   | (47) 14.07.2021                      |
| ELECTRICAL CONNECTOR              | F02C 9/28                                    | (22) 24.09.2015                      |
| (73) Battelle Memorial Institute  | (11) EP3656999                               | (54) DEVICE FOR PREVENTING           |
| (72) Burton, Brett                | (21) EP19211335.5                            | ROTATIONAL MOVEMENT OF FAILED        |
| Cox, Andrew                       | (47) 14.07.2021                              | SELECTOR LEVER                       |
| Wolfe, Darren                     | (22) 25.11.2019                              | (73) Hamilton Sundstrand Corporation |
| (31) 201261654787 P               | (54) ENGINE AND PROPELLER CONTROL            | (72) CRANDALL-SEIBERT, Cory M.       |
| (32) 01.06.2012                   | SYSTEM                                       | BAINES, Andrew N.                    |
| (33) United States of America     | (73) Pratt & Whitney Canada Corp.            | MAYER, Timothy Michael               |
| (51) B64C 3/18                    | (72) CHAHAL, Jasraj                          | VOSS, Gary L.                        |
| B64D 37/08                        | DUKE, Brant                                  | BRADSHAW, Sean                       |
| B64D 37/10                        | LISIO, Carmine                               | GLENN, Roger F.                      |
| F16L 37/00                        | JARVO, Jim                                   | (31) 201414494988                    |
| F16L 41/02                        | ZINGARO, Giancarlo                           | (32) 24.09.2014                      |
| (11) EP3587248                    | (31) 201862770912 P                          | (33) United States of America        |
| (21) EP19177447.0                 | 201862770896 P                               | (51) B64C 23/06                      |



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|------------------------------------|-------------------------------------|--------------------------------|
| B64D 1/02                          | LINTON, Bradley D.                  | (31) 201615179585              |
| F41A 21/32                         | (31) 201862658205 P                 | (32) 10.06.2016                |
| F41F 1/08                          | 201816182442                        | (33) United States of America  |
| F41H 11/02                         | (32) 16.04.2018                     | (51) B64C 39/02                |
| F42B 5/15                          | 06.11.2018                          | B64D 1/12                      |
| (11) EP3458799                     | (33) United States of America       | B64D 1/22                      |
| (21) EP17799760.8                  | United States of America            | B64D 17/38                     |
| (47) 07.07.2021                    | (51) B64C 29/00                     | B66D 1/12                      |
| (87) SE2017050438                  | B64C 39/02                          | G05D 1/08                      |
| 23.11.2017                         | (11) EP3700813                      | G06Q 10/08                     |
| (22) 05.05.2017                    | (21) EP18807763.0                   | (11) EP3509947                 |
| (54) COUNTERMEASURE DISPENSER      | (47) 07.07.2021                     | (21) EP17849324.3              |
| WITH VARIABLE SPOILER AND          | (87) US2018057837                   | (47) 14.07.2021                |
| METHOD FOR LAUNCHING A             | 02.05.2019                          | (87) US2017048908              |
| COUNTERMEASURE                     | (22) 26.10.2018                     | 15.03.2018                     |
| (73) Saab AB                       | (54) MULTI-COPTER                   | (22) 28.08.2017                |
| (72) ZÄTTERQVIST, Christer         | (73) Elroy Air, Inc.                | (54) METHODS AND SYSTEMS FOR   |
| (31) 1650667                       | (72) WEEKES, Terik                  | RAISING AND LOWERING A PAYLOAD |
| (32) 17.05.2016                    | BELARDO, Sean                       | (73) Wing Aviation LLC         |
| (33) Sweden                        | COPE, Clint                         | (72) SHANNON, Trevor           |
| (51) B64C 27/00                    | OWEN, Colin                         | PRAGER, Andre                  |
| (11) EP3590830                     | MERRILL, David                      | (31) 201662385854 P            |
| (21) EP19173625.5                  | (31) 201762578254 P                 | 201615389326                   |
| (47) 07.07.2021                    | 201762609107 P                      | (32) 09.09.2016                |
| (22) 09.05.2019                    | 201762610659 P                      | 22.12.2016                     |
| (54) METHOD AND APPARATUS FOR      | (32) 27.10.2017                     | (33) United States of America  |
| PROXIMITY CONTROL BETWEEN          | 21.12.2017                          | United States of America       |
| ROTATING AND NON-ROTATING          | 27.12.2017                          | (51) B64C 39/02                |
| AIRCRAFT COMPONENTS                | (33) United States of America       | B64F 1/00                      |
| (73) Bell Helicopter Textron Inc.  | United States of America            | B64F 1/12                      |
| (72) CRAVENER, Kyle, Thomas        | United States of America            | G05D 1/00                      |
| SHERRILL, Paul                     | (51) B64C 39/02                     | G05D 1/10                      |
| (31) 201816024986                  | B64D 1/02                           | H02J 7/00                      |
| (32) 02.07.2018                    | B64D 1/12                           | B60L 53/16                     |
| (33) United States of America      | B64D 1/22                           | B60L 53/36                     |
| (51) B64C 27/00                    | B64D 17/38                          | (11) EP3487760                 |
| F16F 15/22                         | B66C 1/36                           | (21) EP17830611.4              |
| G01H 1/00                          | H01F 7/06                           | (47) 14.07.2021                |
| (11) EP2945864                     | (11) EP3492380                      | (87) IL2017050821              |
| (21) EP14704947.2                  | (21) EP17834799.3                   | 25.01.2018                     |
| (47) 07.07.2021                    | (47) 07.07.2021                     | (22) 20.07.2017                |
| (87) US2014012044                  | (87) KR2017008129                   | (54) METHODS AND SYSTEMS OF    |
| 24.07.2014                         | 01.02.2018                          | ANCHORING AN UNMANNED AERIAL   |
| (22) 17.01.2014                    | (22) 27.07.2017                     | VEHICLE ON A GROUND STATION    |
| (54) DEVICES, SYSTEMS, AND METHODS | (54) HOME-DELIVERED ARTICLE LOADING | (73) Percepto Robotics Ltd     |
| FOR ACTIVE VIBRATION CONTROL       | DEVICE FOR DRONE                    | (72) RAZ, Raviv                |
| FORCE, SPEED AND VIBRATION         | (73) Shin, Jeong-Hoon               | JAFFE, Jonathan                |
| MONITORING AND CONTROL             | (72) Shin, Jeong-Hoon               | BLONDER, Sagi                  |
| (73) LORD Corporation              | (31) 20160095718                    | (31) 201662364855 P            |
| (72) SWANSON, Doug A.              | (32) 27.07.2016                     | (32) 21.07.2016                |
| BLACK, Paul R.                     | (33) Korea (Republic)               | (33) United States of America  |
| CLARK, David                       | (51) B64C 39/02                     | (51) B64C 39/02                |
| FERGUSON, Matthew K.               | B64D 1/02                           | G05D 1/10                      |
| RYU, Jihan                         | B64D 1/12                           | (11) EP3474109                 |
| (31) 201361754163 P                | B64D 9/00                           | (21) EP18199439.3              |
| (32) 18.01.2013                    | B64D 17/38                          | (47) 14.07.2021                |
| (33) United States of America      | B66C 1/38                           | (22) 09.10.2018                |
| (51) B64C 27/54                    | (11) EP3468871                      | (54) MEASURING DEVICE, CONTROL |
| B64F 5/40                          | (21) EP17810696.9                   | DEVICE FOR UNMANNED AERIAL     |
| (11) EP3556653                     | (47) 07.07.2021                     | VEHICLE AND METHOD FOR         |
| (21) EP19151059.3                  | (87) US2017033888                   | CONTROLLING UNMANNED AERIAL    |
| (47) 14.07.2021                    | 14.12.2017                          | VEHICLE                        |
| (22) 09.01.2019                    | (22) 22.05.2017                     | (73) Topcon Corporation        |
| (54) SYSTEMS AND METHODS TO        | (54) APPARATUSES FOR RELEASING A    | (72) SASAKI, You               |
| VERIFY MAIN ROTOR SWASHPLATE       | PAYLOAD FROM AN AERIAL TETHER       | (31) 2017201004                |
| POSITIONING                        | (73) Wing Aviation LLC              | (32) 17.10.2017                |
| (73) Bell Helicopter Textron Inc.  | (72) SHANNON, Trevor                | (33) Japan                     |
| (72) HAUGEGERG, Chad R.            | LI, Zhefei                          | (51) B64D 1/02                 |

|                              |                                           |                                 |
|------------------------------|-------------------------------------------|---------------------------------|
| B64D 7/00                    | G08B 5/22                                 | 09.04.2015                      |
| F41A 27/24                   | H04B 10/80                                | (22) 01.10.2014                 |
| F41F 1/08                    | H02J 50/00                                | (54) AIRCRAFT AIR CHILLER WITH  |
| F41H 11/02                   | (11) EP3556656                            | REDUCED PROFILE                 |
| F42B 5/15                    | (21) EP19169365.4                         | (73) B/E Aerospace, Inc.        |
| F42B 12/70                   | (47) 07.07.2021                           | (72) LU, Qiao                   |
| (11) EP3458798               | (22) 16.04.2019                           | GOEDECKER, William J.           |
| (21) EP17799759.0            | (54) CARGO RESTRAINT SENSOR               | FORBES, James R.                |
| (47) 07.07.2021              | SYSTEM                                    | (31) 201361885388 P             |
| (87) SE2017050437            | (73) The Boeing Company                   | 201414502930                    |
| 23.11.2017                   | (72) WEISFELNER, Justin Louis             | (32) 01.10.2013                 |
| (22) 05.05.2017              | (31) 201815956669                         | 30.09.2014                      |
| (54) DISPENSER WITH TILTABLE | (32) 18.04.2018                           | (33) United States of America   |
| MAGAZINE FOR LAUNCHING       | (33) United States of America             | United States of America        |
| COUNTERMEASURES              | (51) B64D 11/00                           | (51) B64D 13/00                 |
| (73) SAAB AB                 | (11) EP2990334                            | B64D 13/06                      |
| (72) ZÄTTERQVIST, Christer   | (21) EP14182416.9                         | B64D 27/18                      |
| (31) 1650665                 | (47) 07.07.2021                           | B64D 27/26                      |
| (32) 17.05.2016              | (22) 27.08.2014                           | B64D 33/02                      |
| (33) Sweden                  | (54) Separating device for separating two | F02C 6/08                       |
| (51) B64D 1/02               | zones of a passenger cabin equipped       | F02C 7/14                       |
| B64D 7/00                    | with overhead luggage bins comprising a   | F02C 7/18                       |
| F41A 27/24                   | movable shell                             | F28D 21/00                      |
| F41F 1/08                    | (73) Airbus Operations GmbH               | (11) EP3666655                  |
| F41H 11/02                   | (72) Breuer, Matthias                     | (21) EP18306695.0               |
| F42B 5/15                    | Moje, Sabrina                             | (47) 14.07.2021                 |
| F42B 12/70                   | (51) B64D 11/00                           | (22) 14.12.2018                 |
| (11) EP3458797               | B64D 11/06                                | (54) AIRCRAFT PROPULSION SYSTEM |
| (21) EP17799758.2            | B64D 45/00                                | INCLUDING A HEAT EXCHANGER      |
| (47) 07.07.2021              | H04L 29/08                                | SYSTEM                          |
| (87) SE2017050436            | D03D 15/54                                | (73) Airbus Operations (S.A.S.) |
| 23.11.2017                   | (11) EP3546355                            | Airbus Operations S.L.          |
| (22) 05.05.2017              | (21) EP19159223.7                         | Airbus SAS                      |
| (54) MAGAZINE FOR LAUNCHING  | (47) 07.07.2021                           | (72) MEDDA, Bruno               |
| COUNTERMEASURES              | (22) 25.02.2019                           | STEVENS, Thomas                 |
| (73) SAAB AB                 | (54) AIRCRAFT AREA HAVING A TEXTILE       | CAYSSIALS, Julien               |
| (72) ZÄTTERQVIST, Christer   | DISPLAY, AND AN AIRCRAFT                  | SOULIE, Adeline                 |
| (31) 1650665                 | INCLUDING SUCH AN AIRCRAFT                | POIRIER, Didier                 |
| 1651463                      | AREA                                      | PINAULT, Pierre-Alain           |
| (32) 17.05.2016              | (73) Airbus Operations GmbH               | MARTINO-GONZALEZ, Esteban       |
| 08.11.2016                   | Airbus (S.A.S.)                           | PRIETO PADILLA, Juan Tomas      |
| (33) Sweden                  | (72) Jourdan, Nicolas                     | BARRON VEGA, Diego              |
| Sweden                       | Quatmann, Frank                           | (51) B64D 25/14                 |
| (51) B64D 1/02               | (31) 201862649888 P                       | F15B 15/19                      |
| B64D 7/00                    | (32) 29.03.2018                           | (11) EP3336364                  |
| F41F 1/08                    | (33) United States of America             | (21) EP17204453.9               |
| F41F 3/06                    | (51) B64D 11/04                           | (47) 07.07.2021                 |
| F41F 3/077                   | B64D 13/06                                | (22) 29.11.2017                 |
| F41H 11/02                   | (11) EP3483067                            | (54) SYSTEM AND METHOD FOR A    |
| F42B 4/26                    | (21) EP18205069.0                         | HEATED GAS CYLINDER ASSEMBLY    |
| F42B 5/15                    | (47) 14.07.2021                           | (73) Goodrich Corporation       |
| F42B 12/70                   | (22) 08.11.2018                           | (72) McFarland, Eric            |
| (11) EP3458800               | (54) COOLING ARRANGEMENT FOR A            | (31) 201615363997               |
| (21) EP17799761.6            | GALLEY AND GALLEY                         | (32) 29.11.2016                 |
| (47) 07.07.2021              | (73) Airbus Operations GmbH               | (33) United States of America   |
| (87) SE2017050439            | (72) Lohse, Ekkehard                      | (51) B64D 33/02                 |
| 23.11.2017                   | Trümper, Torsten                          | F02C 7/045                      |
| (22) 05.05.2017              | (31) 102017126693                         | (11) EP3623295                  |
| (54) DISPENSER WITH A COVER  | (32) 14.11.2017                           | (21) EP19197406.2               |
| AND METHOD FOR LAUNCHING     | (33) Germany                              | (47) 14.07.2021                 |
| COUNTERMEASURES              | (51) B64D 11/04                           | (22) 13.09.2019                 |
| (73) Saab AB                 | B64D 13/06                                | (54) NACELLE INLET, GAS TURBINE |
| (72) ZÄTTERQVIST, Christer   | F25D 11/00                                | ENGINE NACELLE COMPRISING       |
| JÖNSSON, Knut Olof           | F25D 17/06                                | SUCH AN INLET AND METHOD OF     |
| (31) 1650666                 | (11) EP3052872                            | MANUFACTURING SUCH AN INLET     |
| (32) 17.05.2016              | (21) EP14789922.3                         | (73) Rohr, Inc.                 |
| (33) Sweden                  | (47) 07.07.2021                           | (72) SORIA, Christian           |
| (51) B64D 9/00               | (87) US2014058596                         | CHIEN, Wentaur Eugene           |

|                                             |                                                 |                                      |
|---------------------------------------------|-------------------------------------------------|--------------------------------------|
| (31) 201816132225                           | (11) EP3599173                                  | (32) 30.04.2014                      |
| (32) 14.09.2018                             | (21) EP19187673.9                               | (33) United States of America        |
| (33) United States of America               | (47) 14.07.2021                                 | (51) B64G 1/22                       |
| (51) B64D 37/32                             | (22) 22.07.2019                                 | B64G 1/40                            |
| (11) EP3666662                              | (54) LIGHTNING-DISSIPATIVE AIRCRAFT             | B64G 1/44                            |
| (21) EP19214779.1                           | ASSEMBLIES AND VALVE FRAMES                     | B64G 1/66                            |
| (47) 07.07.2021                             | UTILIZED IN THE SAME                            | H01Q 1/08                            |
| (22) 10.12.2019                             | (73) Honeywell International Inc.               | H01Q 1/12                            |
| (54) CATALYTIC FUEL TANK INERTING           | (72) BIRCHAK, Daniel C.                         | H01Q 1/28                            |
| APPARATUS FOR AIRCRAFT                      | PEREK, John                                     | H01Q 3/46                            |
| (73) Hamilton Sundstrand Corporation        | RYAN, William F.                                | H01Q 15/14                           |
| (72) EMERSON, Sean C.                       | (31) 201816046358                               | H01Q 15/16                           |
| COCKS, Peter AT                             | (32) 26.07.2018                                 | (11) EP3353855                       |
| SMITH, Lance L.                             | (33) United States of America                   | (21) EP16849901.0                    |
| SURAWSKI, Eric                              | (51) B64D 47/04                                 | (47) 07.07.2021                      |
| (31) 201816216094                           | (11) EP3613675                                  | (87) US2016053844                    |
| (32) 11.12.2018                             | (21) EP19191967.9                               | 30.03.2017                           |
| (33) United States of America               | (47) 14.07.2021                                 | (22) 26.09.2016                      |
| (51) B64D 37/32                             | (22) 15.08.2019                                 | (54) DEPLOYABLE STRUCTURE FOR USE    |
| F01D 25/08                                  | (54) VISIBILITY RANGE SENSING                   | IN ESTABLISHING A REFLECTARRAY       |
| F02C 7/12                                   | (73) Simmonds Precision Products, Inc.          | ANTENNA                              |
| F02C 7/232                                  | (72) RUTKIEWICZ, Robert                         | (73) MMA Design, LLC                 |
| F16K 17/38                                  | MATTY, David                                    | (72) HARVEY, Thomas J.               |
| F16K 31/00                                  | RAMTHUN, Kent Allan                             | HARVEY, Toby J.                      |
| F16K 49/00                                  | PESIK, Joseph                                   | WIENS, Mitchell T.                   |
| (11) EP3643953                              | (31) 201816105701                               | BAILEY, Mark A.                      |
| (21) EP19204960.9                           | (32) 20.08.2018                                 | STAMM, Shane E.                      |
| (47) 07.07.2021                             | (33) United States of America                   | PELZMANN, Christopher A.             |
| (22) 23.10.2019                             | (51) B64D 47/04                                 | (31) 201562233115 P                  |
| (54) FIRE ACTIVATED COOLING FLUID           | B64D 47/06                                      | (32) 25.09.2015                      |
| VALVE                                       | (11) EP3403936                                  | (33) United States of America        |
| (73) Hamilton Sundstrand Corporation        | (21) EP17171916.4                               | (51) B64G 1/22                       |
| (72) PARADISE, Bruce D.                     | (47) 14.07.2021                                 | B64G 1/44                            |
| OWUSU, Kofi                                 | (22) 19.05.2017                                 | B64G 1/50                            |
| (31) 201816171518                           | (54) COMBINED AIRCRAFT TAKE-OFF AND             | (11) EP3536617                       |
| (32) 26.10.2018                             | TOWER SIGNAL LIGHT UNIT AND                     | (21) EP18305813.0                    |
| (33) United States of America               | AIRCRAFT COMPRISING THE SAME                    | (47) 07.07.2021                      |
| (51) B64D 39/02                             | (73) Goodrich Lighting Systems GmbH             | (22) 26.06.2018                      |
| F15B 21/04                                  | (72) JHA, Anil Kumar                            | (54) A FLEXIBLE RADIATIVE FIN FOR A  |
| (11) EP2703293                              | HESSLING-VON HEIMENDAHL, Andre                  | SPACECRAFT                           |
| (21) EP13181868.4                           | MENNE, Norbert                                  | (73) Airbus Defence and Space SAS    |
| (47) 14.07.2021                             | (51) B64F 1/315                                 | Airbus Defence and Space Netherlands |
| (22) 27.08.2013                             | (11) EP3412580                                  | B.V.                                 |
| (54) Hydraulic motor assembly for an aerial | (21) EP18173545.7                               | (72) MENA, Fabrice                   |
| refueling system                            | (47) 14.07.2021                                 | BENTHEM, Bruin                       |
| (73) Federal Industries, Inc.               | (22) 22.05.2018                                 | (51) B64G 1/64                       |
| (72) Bartov, Asher                          | (54) A MECHANISM FOR CHANGING THE               | (11) EP3677519                       |
| Kubilos, Charles                            | HEIGHT OF PASSENGER STAIRS                      | (21) EP19858542.4                    |
| (31) 201213597002                           | (73) Tips d.o.o.                                | (47) 07.07.2021                      |
| (32) 28.08.2012                             | (72) Sneberger, Silvo                           | (87) CN2019101669                    |
| (33) United States of America               | Pustavrh, Robert                                | 12.03.2020                           |
| (51) B64D 45/00                             | Smole, Marjan                                   | (22) 21.08.2019                      |
| H02J 1/10                                   | (31) 201700145                                  | (54) SPLIT NUT TYPE UNLOCKING DEVICE |
| (11) EP3407448                              | (32) 24.05.2017                                 | WITH NON-EXPLOSIVE ACTUATOR          |
| (21) EP18172824.7                           | (33) Slovenia                                   | (73) Beijing Smart-Wing Aerospace    |
| (47) 14.07.2021                             | (51) B64F 5/10                                  | Technology Ltd.                      |
| (22) 17.05.2018                             | (11) EP2939931                                  | (72) LIU, Jingying                   |
| (54) REGULATOR UNIT FOR DISTRIBUTED         | (21) EP14196553.3                               | (31) 201821442102 U                  |
| SENSOR SYSTEMS                              | (47) 14.07.2021                                 | 201811279342                         |
| (73) Simmonds Precision Products, Inc.      | (22) 05.12.2014                                 | (32) 04.09.2018                      |
| (72) MCBRIDE, Benjamin                      | (54) Flexible manufacturing system for aircraft | 30.10.2018                           |
| GANG, Travis                                | structures                                      | (33) China                           |
| CARINI, Peter                               | (73) The Boeing Company                         | China                                |
| (31) 201715602780                           | (72) Day, Dan Dresskell                         | (51) B64G 3/00                       |
| (32) 23.05.2017                             | Munk, Clayton Lynn                              | G01S 3/04                            |
| (33) United States of America               | Schmitt, Steven John                            | G01S 3/40                            |
| (51) B64D 45/02                             | Reid, Eric M.                                   | (11) EP3491408                       |
|                                             | (31) 201461986824 P                             | (21) EP17757800.2                    |

|                                           |                                         |                                    |
|-------------------------------------------|-----------------------------------------|------------------------------------|
| (47) 14.07.2021                           | (31) 18193695                           | (54) CONVEYOR DEVICE FOR CONVEYING |
| (87) FR2017052112                         | (32) 11.09.2018                         | FLEXIBLE CONTAINERS ALONG A        |
| 01.02.2018                                | (33) European Patent Office (EPO)       | PACKAGING LINE                     |
| (22) 27.07.2017                           | (51) B65B 19/20                         | (73) Mespack, S.L.                 |
| (54) METHOD AND SYSTEM FOR                | B65B 19/22                              | (72) SOLÀ GIL, Josep               |
| ESTIMATING THE DIRECTION OF               | B65D 85/10                              | (51) B65B 55/02                    |
| A SATELLITE IN THE TRANSFER               | (11) EP3643626                          | B65B 59/00                         |
| PHASE FROM AN INITIAL ORBIT TO A          | (21) EP19204380.0                       | B67C 3/04                          |
| MISSION ORBIT                             | (47) 07.07.2021                         | B67C 3/06                          |
| (73) Airbus Defence and Space SAS         | (22) 21.10.2019                         | B67C 3/16                          |
| (72) AYMES, Jean-Marc                     | (54) METHOD AND DEVICE FOR              | B67C 3/20                          |
| MAZUEL, Sébastien                         | MANUFACTURING PACKAGING FOR             | B67C 3/26                          |
| POULET, Antoine                           | CIGARETTE INDUSTRY PRODUCTS             | B67C 3/28                          |
| (31) 1657209                              | (73) Focke & Co. (GmbH & Co. KG)        | F16K 31/08                         |
| (32) 27.07.2016                           | (72) SCHNEIDER, Christoph               | G01G 17/04                         |
| (33) France                               | FÖRSTMANN, Dirk                         | (11) EP3103761                     |
| (51) B65B 9/04                            | SCHÜNEMANN, Christoph                   | (21) EP16173827.3                  |
| B65B 31/02                                | HEIN, Viktor                            | (47) 14.07.2021                    |
| B65B 47/00                                | (31) 102018126539                       | (22) 21.03.2014                    |
| (11) EP3733531                            | (32) 24.10.2018                         | (54) FILLER UNIT                   |
| (21) EP19382332.5                         | (33) Germany                            | (73) PepsiCo, Inc.                 |
| (47) 14.07.2021                           | (51) B65B 23/06                         | (72) EATON, John A.                |
| (22) 03.05.2019                           | (11) EP3630622                          | MARTIN, David William              |
| (54) METHOD AND MACHINE FOR               | (21) EP18731226.9                       | WARBURTON, David J.                |
| PACKAGING PRODUCTS                        | (47) 07.07.2021                         | COLEMAN, Nathan J.                 |
| (73) Ulma Packaging Technological Center, | (87) NL2018050354                       | FELLER, Samuel F.                  |
| S.Coop.                                   | 06.12.2018                              | EVANS, Thomas J.                   |
| (72) ARBULU ORMAECHEA, Nerea              | (22) 30.05.2018                         | SORGE, Jason K.                    |
| ARREGI ARAMBARRI, Nicolas                 | (54) PACKAGING DEVICE FOR ROUND         | STRAUB, Randy A.                   |
| IZQUIERDO EREÑO, Eneko                    | ARTICLES SUCH AS EGGS                   | (31) 201361804452 P                |
| JAUREGUI BALANZATEGUI, Juan Jose          | (73) Sanovo Technology Netherlands B.V. | (32) 22.03.2013                    |
| (51) B65B 9/04                            | (72) HORDIJK, Jan                       | (33) United States of America      |
| B65B 57/00                                | VAN ASSELT, Peter Anton                 | (51) B65B 57/02                    |
| B65B 57/10                                | WIKKERINK, Dirk Willem                  | B65B 57/18                         |
| G01N 21/88                                | (31) 2019010                            | B65C 9/42                          |
| G01N 21/95                                | (32) 01.06.2017                         | (11) EP2760748                     |
| G06T 7/00                                 | (33) Netherlands                        | (21) EP12766397.9                  |
| (11) EP3553504                            | (51) B65B 27/04                         | (47) 07.07.2021                    |
| (21) EP17878905.3                         | B65B 35/44                              | (87) EP2012067853                  |
| (47) 14.07.2021                           | B65B 35/58                              | 04.04.2013                         |
| (87) JP2017021812                         | B65B 61/14                              | (22) 12.09.2012                    |
| 14.06.2018                                | B65G 47/252                             | (54) INTEGRATED QUALITY CONTROL    |
| (22) 13.06.2017                           | (11) EP3652076                          | OF CONSUMABLE MATERIALS FOR        |
| (54) INSPECTION DEVICE AND PTP            | (21) EP18737996.1                       | PACKAGING MACHINES                 |
| PACKAGING MACHINE                         | (47) 14.07.2021                         | (73) Krones AG                     |
| (73) CKD CORPORATION                      | (87) IB2018054451                       | (72) HUBER, Wolfgang               |
| (72) TAGUCHI, Yukihiro                    | 17.01.2019                              | Böhm, Johannes                     |
| INOUCHI, Tadashi                          | (22) 18.06.2018                         | (31) 102011054080                  |
| (31) 2016238322                           | (54) PLANT FOR PACKING PVC BOTTLES      | (32) 30.09.2011                    |
| (32) 08.12.2016                           | OR OTHER SIMILAR CONTAINERS             | (33) Germany                       |
| (33) Japan                                | IN PACKS BY APPLYING BAND-LIKE          | (51) B65C 1/02                     |
| (51) B65B 9/12                            | BINDINGS CALLED ALSO AS STRAPS          | B65C 9/28                          |
| B65B 31/02                                | (73) Ribí, Leon                         | (11) EP3566961                     |
| B65B 31/04                                | (72) Ribí, Leon                         | (21) EP19159305.2                  |
| B65B 51/26                                | (31) 201700077504                       | (47) 14.07.2021                    |
| B65B 9/20                                 | (32) 10.07.2017                         | (22) 26.02.2019                    |
| B65B 9/207                                | (33) Italy                              | (54) METHOD AND DEVICE FOR THE     |
| (11) EP3623301                            | (51) B65B 43/12                         | CONTACTLESS APPLICATION OF         |
| (21) EP19195386.8                         | B65B 43/32                              | SELF-ADHESIVE TRANSPONDERS TO      |
| (47) 14.07.2021                           | B65B 43/46                              | OBJECTS                            |
| (22) 04.09.2019                           | B65B 65/02                              | (73) Gustav Wilms OHG              |
| (54) PACKAGING APPARATUS FOR              | B65G 47/90                              | (72) Wilms, Heinrich               |
| FORMING SEALED PACKAGES                   | B65G 54/02                              | (31) 102018003613                  |
| (73) Tetra Laval Holdings & Finance S.A.  | (11) EP3744649                          | (32) 04.05.2018                    |
| (72) SANIBONDI, Paolo                     | (21) EP19382421.6                       | (33) Germany                       |
| FERRARI, Claudio                          | (47) 07.07.2021                         | (51) B65C 1/02                     |
| GARUTI, Nicola                            | (22) 27.05.2019                         | B65C 9/46                          |
| MACINI, Nicola                            |                                         | (11) EP3442873                     |

|                                     |                                          |                                     |
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| (21) EP16898784.0                   | ROULLE, Alain                            | FILIPPINI, Maurizio                 |
| (47) 07.07.2021                     | (31) 1563042                             | (31) 18177176                       |
| (87) US2016026855                   | 1653875                                  | (32) 12.06.2018                     |
| 19.10.2017                          | (32) 22.12.2015                          | (33) European Patent Office (EPO)   |
| (22) 11.04.2016                     | 29.04.2016                               | (51) B65D 27/06                     |
| (54) LABEL PRINTER APPLICATOR       | (33) France                              | B65D 30/20                          |
| SYSTEM                              | France                                   | B65D 33/01                          |
| (73) Le, Van                        | (51) B65D 1/02                           | B65D 33/18                          |
| (72) Le, Van                        | B65D 81/24                               | B65D 33/22                          |
| (51) B65C 9/06                      | B65D 85/72                               | (11) EP3647219                      |
| B67C 3/22                           | C12H 1/14                                | (21) EP19205931.9                   |
| B67C 7/00                           | (11) EP2773742                           | (47) 07.07.2021                     |
| (11) EP3386904                      | (21) EP12846221.5                        | (22) 29.10.2019                     |
| (21) EP15910330.8                   | (47) 07.07.2021                          | (54) METHOD FOR FILLING A PAPER BAG |
| (47) 07.07.2021                     | (87) US2012061512                        | (73) Segezha Packaging GmbH         |
| (87) US2015064186                   | 10.05.2013                               | (72) Schmoor, Ulrich                |
| 15.06.2017                          | (22) 24.10.2012                          | (31) 102018126929                   |
| (22) 07.12.2015                     | (54) ADDITION OF TRANSITION METAL        | (32) 29.10.2018                     |
| (54) METHOD FOR FILLING A POLYMERIC | TO WINES AND WINE TYPE                   | (33) Germany                        |
| CONTAINER                           | BEVERAGES IN METALLIC BEVERAGE           | (51) B65D 30/08                     |
| (73) Amcor Rigid Plastics USA, LLC  | CONTAINERS TO PREVENT                    | B65D 30/20                          |
| (72) LANE, Michael T.               | UNWANTED AROMAS                          | B65D 65/42                          |
| (51) B65D 1/02                      | (73) Ball Corporation                    | B65D 85/36                          |
| B65D 1/46                           | (72) BRENDENCKE, Scott                   | (11) EP3643634                      |
| B65D 23/10                          | (31) 201161553732 P                      | (21) EP19201224.3                   |
| (11) EP3507201                      | (32) 31.10.2011                          | (47) 14.07.2021                     |
| (21) EP17761400.5                   | (33) United States of America            | (22) 03.10.2019                     |
| (47) 07.07.2021                     | (51) B65D 1/32                           | (54) PAPER, BREAD BAG AND METHOD    |
| (87) US2017047891                   | B65D 33/25                               | FOR MANUFACTURE THEREOF             |
| 08.03.2018                          | B65D 75/58                               | (73) Ace Packaging NV               |
| (22) 22.08.2017                     | B65D 77/28                               | (72) Stappaerts, Olivier            |
| (54) CONTAINER                      | (11) EP3668800                           | Stappaerts, Dave                    |
| (73) Altium Packaging LP            | (21) EP18796150.3                        | (31) 201805680                      |
| Uniloy, Inc.                        | (47) 07.07.2021                          | (32) 04.10.2018                     |
| (72) PALMER, Joey                   | (87) US2018052101                        | (33) Belgium                        |
| JANECZEK, James                     | 28.03.2019                               | (51) B65D 33/00                     |
| SPAGNOLI, Robert                    | (22) 21.09.2018                          | B65D 33/25                          |
| (31) 201615255403                   | (54) SELF-SEALING DOSEPACK               | B65D 50/00                          |
| (32) 02.09.2016                     | (73) Colgate-Palmolive Company           | (11) EP3585702                      |
| (33) United States of America       | (72) BARRIOS, Mario                      | (21) EP18758342.2                   |
| (51) B65D 1/02                      | VEGA, Carolina                           | (47) 07.07.2021                     |
| B65D 39/00                          | (31) 201762562688 P                      | (87) IB2018052817                   |
| B65D 39/16                          | (32) 25.09.2017                          | 30.08.2018                          |
| (11) EP3480129                      | (33) United States of America            | (22) 23.04.2018                     |
| (21) EP17820630.6                   | (51) B65D 5/48                           | (54) CHILD RESISTANT SEALING SYSTEM |
| (47) 14.07.2021                     | (11) EP3681811                           | (73) Quark Distribution, Inc.       |
| (87) RU2017000467                   | (21) EP18782516.1                        | (72) KIRSH, Ross                    |
| 04.01.2018                          | (47) 07.07.2021                          | (31) 201715440091                   |
| (22) 30.06.2017                     | (87) IB2018057000                        | (32) 23.02.2017                     |
| (54) COMBINATION OF A CORK AND A    | 21.03.2019                               | (33) United States of America       |
| BOTTLE                              | (22) 13.09.2018                          | (51) B65D 33/16                     |
| (73) Finist Global Trading SIA      | (54) COLLAPSIBLE CARDBOARD BOX AND       | B65D 75/58                          |
| (72) SERGIENKO, Igor Nikolaevich    | METHOD FOR ERECTING SAID BOX             | (11) EP3608249                      |
| (31) 2016126615                     | (73) Stora Enso Oyj                      | (21) EP19189942.6                   |
| (32) 01.07.2016                     | (72) LUBINSKI, Tomasz                    | (47) 14.07.2021                     |
| (33) Russian Federation             | (31) 1751128                             | (22) 28.01.2013                     |
| (51) B65D 1/02                      | (32) 15.09.2017                          | (54) DISPENSING CAP AS AN ELEMENT   |
| B65D 41/34                          | (33) Sweden                              | OF A DISPENSING SYSTEM              |
| (11) EP3393924                      | (51) B65D 5/74                           | (73) Poly-clip System GmbH & Co. KG |
| (21) EP16809094.2                   | B65D 17/50                               | (72) Hanten, Jürgen                 |
| (47) 07.07.2021                     | (11) EP3581509                           | (31) 12000555                       |
| (87) EP2016080919                   | (21) EP19177039.5                        | (32) 27.01.2012                     |
| 29.06.2017                          | (47) 07.07.2021                          | (33) European Patent Office (EPO)   |
| (22) 14.12.2016                     | (22) 28.05.2019                          | (51) B65D 41/32                     |
| (54) SHUTOFF SYSTEM FOR A           | (54) PACKAGE COMPRISING AN OPENING       | B65D 41/34                          |
| CONTAINER                           | DEVICE                                   | B65D 47/08                          |
| (73) Svalinn Cap Systems AG         | (73) Tetra Laval Holdings & Finance S.A. | B65D 55/16                          |
| (72) KOMET, Israel                  | (72) MARTINI, Pietro                     |                                     |

|                                     |                                    |                                             |
|-------------------------------------|------------------------------------|---------------------------------------------|
| (11) EP3670377                      | (72) BOOD, Arie                    | OF A VEHICLE USING THE AQUEOUS              |
| (21) EP19383122.9                   | (31) 2019573                       | UREA SOLUTION                               |
| (47) 14.07.2021                     | (32) 19.09.2017                    | (73) Yara International ASA                 |
| (22) 17.12.2019                     | (33) Netherlands                   | (72) SCHOONDERBEEK, Jeroen                  |
| (54) CAPPING DEVICE THAT IS AFFIXED | (51) B65D 65/46                    | JØRGENSEN, Sigurd                           |
| TO THE NECK OF A CONTAINER          | B65D 81/32                         | (31) 16154333                               |
| (73) Betapack, S.A.U.               | C11D 17/04                         | 16154336                                    |
| (72) DELCAMBRE, Pierre              | (11) EP3684903                     | 16190446                                    |
| (31) 201831241                      | (21) EP18789251.8                  | (32) 04.02.2016                             |
| (32) 19.12.2018                     | (47) 14.07.2021                    | 04.02.2016                                  |
| (33) Spain                          | (87) NL2018050618                  | 23.09.2016                                  |
| (51) B65D 50/04                     | 28.03.2019                         | (33) European Patent Office (EPO)           |
| (11) EP3098181                      | (22) 19.09.2018                    | European Patent Office (EPO)                |
| (21) EP14880010.5                   | (54) POUCHED UNIT AND METHOD OF    | European Patent Office (EPO)                |
| (47) 07.07.2021                     | USING SAID POUCHED UNIT            | (51) B65D 75/58                             |
| (87) KR2014000734                   | (73) Eme Engel Machinefabriek En   | B65D 85/10                                  |
| 30.07.2015                          | Engineering B.V.                   | (11) EP3572352                              |
| (22) 27.01.2014                     | (72) BOOD, Arie                    | (21) EP19185808.3                           |
| (54) SIDE PRESS-TYPE SAFETY CAP     | (31) 2019573                       | (47) 14.07.2021                             |
| (73) Yonwoo Co., Ltd.               | (32) 19.09.2017                    | (22) 25.11.2015                             |
| (72) JUNG, Seo-Hui                  | (33) Netherlands                   | (54) PACK OF TOBACCO INDUSTRY               |
| CHEON, Sung-Woo                     | (51) B65D 65/46                    | PRODUCTS AND METHOD                         |
| JUNG, Shin-Bok                      | C11D 17/04                         | ASSOCIATED                                  |
| (31) 20140007657                    | (11) EP3122864                     | (73) British American Tobacco (Investments) |
| (32) 22.01.2014                     | (21) EP15715913.8                  | Limited                                     |
| (33) Korea (Republic)               | (47) 07.07.2021                    | (72) BRAY, Andrew                           |
| (51) B65D 51/22                     | (87) US2015022173                  | FALLON, Gary                                |
| (11) EP3621892                      | 01.10.2015                         | GIBSON, Paul                                |
| (21) EP17739288.3                   | (22) 24.03.2015                    | (31) 201421707                              |
| (47) 07.07.2021                     | (54) PRINTED WATER SOLUBLE POUCH   | (32) 05.12.2014                             |
| (87) EP2017067776                   | (73) The Procter & Gamble Company  | (33) United Kingdom                         |
| 17.01.2019                          | (72) MURPHY, Bryan, Patrick        | (51) B65D 77/04                             |
| (22) 13.07.2017                     | LABEQUE, Regine                    | (11) EP3509963                              |
| (54) STOPPER FOR RECEPTACLE         | BRANDT SANZ, Miguel                | (21) EP17767995.8                           |
| AND ASSEMBLY COMPRISING A           | CURCIC, Nikola                     | (47) 14.07.2021                             |
| RECEPTACLE, PARTICULARLY A          | GABRIELE, Andrea                   | (87) EP2017001074                           |
| TUBE, AND SUCH A STOPPER            | (31) 201461971019 P                | 15.03.2018                                  |
| (73) Albéa Services                 | (32) 27.03.2014                    | (22) 12.09.2017                             |
| (72) MAURICE, Thierry               | (33) United States of America      | (54) PALLET CONTAINER                       |
| DEFERT, Sylvain                     | (51) B65D 75/52                    | (73) Mauser-Werke GmbH                      |
| (51) B65D 63/08                     | (11) EP3426572                     | (72) WEYRAUCH, Detlev                       |
| F16L 33/08                          | (21) EP17713814.6                  | ADOLFS, Stefan                              |
| (11) EP3383760                      | (47) 14.07.2021                    | (31) 202016005519 U                         |
| (21) EP16871285.9                   | (87) US2017021465                  | (32) 12.09.2016                             |
| (47) 14.07.2021                     | 14.09.2017                         | (33) Germany                                |
| (87) US2016063105                   | (22) 09.03.2017                    | (51) B65D 81/05                             |
| 08.06.2017                          | (54) PACKAGES WITH RAISED PORTIONS | B65D 81/07                                  |
| (22) 21.11.2016                     | (73) The Procter & Gamble Company  | (11) EP3411309                              |
| (54) HOSE CLAMP                     | (72) O'DONNELL, Hugh, Joseph       | (21) EP16819187.2                           |
| (73) Norma U.S. Holding LLC         | THEISS, Edward, Daniel             | (47) 07.07.2021                             |
| (72) GEESE, Brian T.                | (31) 201662306126 P                | (87) IB2016057679                           |
| VANG, Julia                         | (32) 10.03.2016                    | 10.08.2017                                  |
| (31) 201514954893                   | (33) United States of America      | (22) 15.12.2016                             |
| (32) 30.11.2015                     | (51) B65D 75/58                    | (54) CLAM SUSPENSION                        |
| (33) United States of America       | (11) EP3411306                     | (73) Sealed Air Corporation (US)            |
| (51) B65D 65/46                     | (21) EP17706168.6                  | (72) RÖSEL, Stephan                         |
| B65D 81/32                          | (47) 14.07.2021                    | (31) 201662289594 P                         |
| C11D 17/04                          | (87) EP2017052467                  | (32) 01.02.2016                             |
| (11) EP3684902                      | 10.08.2017                         | (33) United States of America               |
| (21) EP18789250.0                   | (22) 03.02.2017                    | (51) B65D 83/14                             |
| (47) 07.07.2021                     | (54) POUCH ASSEMBLY FOR HOLDING    | (11) EP3544908                              |
| (87) NL2018050617                   | AN AQUEOUS UREA SOLUTION           | (21) EP16922538.0                           |
| 28.03.2019                          | FOR USE IN AN SCR SYSTEM FOR       | (47) 07.07.2021                             |
| (22) 19.09.2018                     | TREATING THE EXHAUST GASES OF      | (87) CN2016107510                           |
| (54) POUCHED UNIT AND METHOD OF     | AN INTERNAL COMBUSTION ENGINE      | 31.05.2018                                  |
| USING SAID POUCHED UNIT             | OF A VEHICLE AND SYSTEM FOR        | (22) 28.11.2016                             |
| (73) Eme Engel Machinefabriek En    | TREATING THE EXHAUST GASES OF      |                                             |
| Engineering B.V.                    | AN INTERNAL COMBUSTION ENGINE      |                                             |

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|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------|
| (54) DEVICE FOR PACKAGING AND DISPENSING A PRODUCT COMPRISING A MOVEABLE PISTON           | (33) United States of America                                           | United States of America                                  |
| (73) L'Oreal                                                                              | (51) B65D 85/804                                                        | (51) B65G 1/137                                           |
| (72) KIM, Jin Seok                                                                        | (11) EP3601103                                                          | B65G 43/08                                                |
| JACQUART, Vincent                                                                         | (21) EP18715502.3                                                       | B65G 43/10                                                |
| LEROUX, Stéphane                                                                          | (47) 07.07.2021                                                         | G05B 19/418                                               |
|                                                                                           | (87) EP2018056438                                                       | G06Q 10/08                                                |
| (51) B65D 83/20                                                                           | 27.09.2018                                                              | (11) EP3728084                                            |
| (11) EP3280659                                                                            | (22) 14.03.2018                                                         | (21) EP18833918.8                                         |
| (21) EP15717372.5                                                                         | (54) DOSAGE POD FOR INFUSION                                            | (47) 07.07.2021                                           |
| (47) 14.07.2021                                                                           | (73) Compagnie Méditerranéenne des Cafés                                | (87) FR2018053208                                         |
| (87) US2015024581                                                                         | (72) BLANC, Jean-Pierre                                                 | 27.06.2019                                                |
| 13.10.2016                                                                                | (31) 1752423                                                            | (22) 11.12.2018                                           |
| (22) 06.04.2015                                                                           | (32) 23.03.2017                                                         | (54) METHOD FOR PALLETISING HETEROGENEOUS OBJECTS         |
| (54) DISPENSING SYSTEMS                                                                   | (33) France                                                             | (73) Solystic                                             |
| (73) S.C. Johnson & Son, Inc.                                                             | (51) B65D 88/16                                                         | (72) CHIROL, Luc                                          |
| (72) RICHARD, Jesse                                                                       | B65D 90/20                                                              | (31) 1762695                                              |
| GORDON, William, F.                                                                       | B65D 90/56                                                              | (32) 21.12.2017                                           |
| BOREL, Bernard                                                                            | (11) EP3658474                                                          | (33) France                                               |
| GAILLARD, Eric                                                                            | (21) EP18740596.4                                                       | (51) B65G 15/42                                           |
|                                                                                           | (47) 07.07.2021                                                         | B65G 15/58                                                |
| (51) B65D 83/54                                                                           | (87) EP2018069195                                                       | F16G 1/28                                                 |
| (11) EP3634883                                                                            | 31.01.2019                                                              | (11) EP2916035                                            |
| (21) EP18735630.8                                                                         | (22) 16.07.2018                                                         | (21) EP13851269.4                                         |
| (47) 07.07.2021                                                                           | (54) TRANSPORT CONTAINER HAVING A VOLUMETRIC BUFFER, METHOD FOR FILLING | (47) 07.07.2021                                           |
| (87) FR2018051119                                                                         | (73) Pörner Ingenieurgesellschaft mbH                                   | (87) JP2013052681                                         |
| 08.11.2018                                                                                | (72) PÖRNER, Andreas                                                    | 08.05.2014                                                |
| (22) 04.05.2018                                                                           | (31) 506332017                                                          | (22) 06.02.2013                                           |
| (54) METERING VALVE AND FLUID PRODUCT DISPENSING DEVICE COMPRISING SUCH A VALVE           | (32) 28.07.2017                                                         | (54) TIMING BELT FOR SUCTION FEEDER                       |
| (73) APTAR France SAS                                                                     | (33) Austria                                                            | (73) Gates Unitta Asia Company                            |
| (72) PETIT, Ludovic                                                                       | (51) B65G 1/04                                                          | Gates Corporation                                         |
| SARRAILH, Ségolène                                                                        | B65G 1/06                                                               | (72) TAJIMA Hiroaki                                       |
| (31) 1754009                                                                              | (11) EP3670390                                                          | (31) 2012239368                                           |
| (32) 05.05.2017                                                                           | (21) EP19216828.4                                                       | (32) 30.10.2012                                           |
| (33) France                                                                               | (47) 07.07.2021                                                         | (33) Japan                                                |
| (51) B65D 83/68                                                                           | (22) 17.12.2019                                                         | (51) B65G 19/02                                           |
| C08G 18/48                                                                                | (54) SHUTTLE FOR TRANSPORTING PALLETS                                   | C03C 21/00                                                |
| C08G 18/76                                                                                | (73) STOW INTERNATIONAL N.V.                                            | (11) EP3458386                                            |
| C08J 9/12                                                                                 | (72) VANDEMERGEL, Luc                                                   | (21) EP17733706.0                                         |
| C08L 75/04                                                                                | (31) 201805914                                                          | (47) 14.07.2021                                           |
| (11) EP3527601                                                                            | (32) 20.12.2018                                                         | (87) US2017037986                                         |
| (21) EP19000046.3                                                                         | (33) Belgium                                                            | 28.12.2017                                                |
| (47) 14.07.2021                                                                           | (51) B65G 1/04                                                          | (22) 16.06.2017                                           |
| (22) 28.01.2019                                                                           | B65G 49/07                                                              | (54) APPARATUSES FOR HOLDING AND CONVEYING GLASS ARTICLES |
| (54) AEROSOL CAN ASSEMBLY                                                                 | B66C 11/06                                                              | (73) Corning Incorporated                                 |
| (73) Colux GmbH                                                                           | B66C 17/06                                                              | (72) DANNOUNX, Thierry Luc Alain                          |
| (72) LECHNER, Roland                                                                      | H01L 21/677                                                             | (31) 201662353427 P                                       |
| (31) 102018001221                                                                         | (11) EP2433300                                                          | (32) 22.06.2016                                           |
| (32) 16.02.2018                                                                           | (21) EP10778180.9                                                       | (33) United States of America                             |
| (33) Germany                                                                              | (47) 07.07.2021                                                         | (51) B65G 21/00                                           |
| (51) B65D 85/38                                                                           | (87) US2010035038                                                       | B65G 21/02                                                |
| H01L 21/673                                                                               | 25.11.2010                                                              | B65G 23/00                                                |
| (11) EP3231009                                                                            | (22) 14.05.2010                                                         | (11) EP3368451                                            |
| (21) EP15867731.0                                                                         | (54) INTEGRATED SYSTEMS FOR INTERFACING WITH SUBSTRATE                  | (21) EP16801583.2                                         |
| (47) 07.07.2021                                                                           | CONTAINER STORAGE SYSTEMS                                               | (47) 07.07.2021                                           |
| (87) US2015064483                                                                         | (73) Crossing Automation, Inc.                                          | (87) IB2016056543                                         |
| 16.06.2016                                                                                | (72) BONORA, Anthony C., GOULD, Richard H., KROLAK, Michael,            | 04.05.2017                                                |
| (22) 08.12.2015                                                                           | (31) 216570 P                                                           | (22) 29.10.2016                                           |
| (54) HORIZONTAL SUBSTRATE CONTAINER WITH INTEGRAL CORNER SPRING FOR SUBSTRATE CONTAINMENT | 332802 P                                                                | (54) CONVEYING SYSTEM                                     |
| (73) Entegris, Inc.                                                                       | (32) 18.05.2009                                                         | (73) AVANCON SA                                           |
| (72) KIRKLAND, Eric, A.                                                                   | 09.05.2010                                                              | (72) SPECHT, Dieter                                       |
| (31) 201462089103 P                                                                       | (33) United States of America                                           | (31) UB20155271                                           |
| (32) 08.12.2014                                                                           |                                                                         | (32) 30.10.2015                                           |
|                                                                                           |                                                                         | (33) Italy                                                |
|                                                                                           |                                                                         | (51) B65G 47/14                                           |
|                                                                                           |                                                                         | G01N 35/00                                                |

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| G01N 35/04                                | B65H 5/06                                  | (47) 07.07.2021                       |
| (11) EP3584583                            | B65H 29/14                                 | (87) US2018033078                     |
| (21) EP19173306.2                         | B65H 29/52                                 | 22.11.2018                            |
| (47) 14.07.2021                           | B65H 31/02                                 | (22) 17.05.2018                       |
| (22) 08.05.2019                           | G07B 17/00                                 | (54) APPARATUS AND METHOD FOR         |
| (54) AUTOMATIC ALIGNMENT AND LABEL        | (11) EP3623327                             | WINDING COIL                          |
| ATTACHING APPARATUS FOR TEST              | (21) EP18405019.3                          | (73) Reelex Packaging Solutions, Inc. |
| TUBE                                      | (47) 07.07.2021                            | (72) KOTZUR, Frank, W.                |
| (73) Energium Co., Ltd.                   | (22) 11.09.2018                            | (31) 20171560034                      |
| (72) Kang, Junghun                        | (54) METHOD FOR FRANKING MAIL              | (32) 19.05.2017                       |
| Lee, Kanghee                              | ITEMS FED ON A CONVEYING ROUTE             | (33) United States of America         |
| Ryu, Hophyang                             | OF A FRANKING MACHINE, AND                 | (51) B65H 18/20                       |
| Park, Sangjun                             | CORRESPONDING MACHINE                      | B65H 18/26                            |
| (31) 20180071017                          | (73) Frama AG                              | B65H 23/198                           |
| (32) 20.06.2018                           | (72) HAUG, Thomas Peter                    | (11) EP3378808                        |
| (33) Korea (Republic)                     | (51) B65H 3/48                             | (21) EP18160633.6                     |
| (51) B65G 47/71                           | B65H 3/62                                  | (47) 07.07.2021                       |
| G07F 7/06                                 | B65H 15/02                                 | (22) 08.03.2018                       |
| G07G 1/00                                 | (11) EP3464140                             | (54) A METHOD OF CONTROLLING          |
| (11) EP3159858                            | (21) EP17728470.0                          | OPERATION OF A WINDER FOR A           |
| (21) EP15190452.1                         | (47) 07.07.2021                            | FIBER WEB                             |
| (47) 14.07.2021                           | (87) EP2017062863                          | (73) Valmet Technologies Oy           |
| (22) 19.10.2015                           | 07.12.2017                                 | (72) PAANASALO, Jari                  |
| (54) RECORDING SYSTEM FOR                 | (22) 29.05.2017                            | ÅKERLUND, Kenneth                     |
| RECORDING OBJECTS                         | (54) PILE PREPARATION UNIT                 | VEIJALAINEN, Mikko                    |
| (73) Wincor Nixdorf International GmbH    | (73) Schur Technology A/S                  | (31) 20175275                         |
| (72) SCHÄFER, Oliver                      | (72) ANDERSSON, Jonas                      | (32) 23.03.2017                       |
| BAITZ, Günter                             | GRANDIN, Niklas                            | (33) Finland                          |
| NEUBERT, Felix                            | GUSTAVSSON, Stefan                         | (51) B65H 18/22                       |
| (51) B65G 59/02                           | (31) 201670376                             | D01G 27/00                            |
| B65G 61/00                                | (32) 30.05.2016                            | (11) EP3211127                        |
| B65H 3/02                                 | (33) Denmark                               | (21) EP16205320.1                     |
| (11) EP3568367                            | (51) B65H 5/22                             | (47) 07.07.2021                       |
| (21) EP18704299.9                         | B65H 5/36                                  | (22) 20.12.2016                       |
| (47) 07.07.2021                           | B65H 29/24                                 | (54) COILING MACHINE FOR COILING      |
| (87) IB2018050240                         | B65H 29/52                                 | COTTON STRIPS INTO COTTON             |
| 19.07.2018                                | B65H 29/70                                 | COILS                                 |
| (22) 15.01.2018                           | (11) EP3274282                             | (73) Trützschler GmbH & Co. KG        |
| (54) SYSTEM AND METHOD FOR FEEDING        | (21) EP16710990.9                          | (72) TRÜTZSCHLER, Heinrich            |
| DIAPHRAGM                                 | (47) 14.07.2021                            | SCHMITZ, Thomas                       |
| (73) Tyco Electronics (Shanghai) Co. Ltd. | (87) EP2016056226                          | (31) 102016103236                     |
| Measurement Specialties (China) Ltd.      | 29.09.2016                                 | (32) 24.02.2016                       |
| Innogetic Technology Co., Ltd.            | (22) 22.03.2016                            | (33) Germany                          |
| (72) DENG, Yingcong                       | (54) SHEET CONVEYOR FOR                    | (51) B65H 19/26                       |
| LIAO, Ziqing                              | TRANSPORTING A SHEET, METHOD               | B65H 19/28                            |
| NING, Ke                                  | FOR TRANSPORTING A SHEET IN A              | D01G 27/00                            |
| ZHANG, Dandan                             | SHEET CONVEYOR, INKJET PRINTING            | (11) EP3409818                        |
| HU, Lvhai                                 | APPARATUS COMPRISING THE                   | (21) EP18171167.2                     |
| WONG, Kok Wai                             | SHEET CONVEYOR                             | (47) 07.07.2021                       |
| (31) 201710029102                         | (73) Canon Production Printing Netherlands | (22) 08.05.2018                       |
| (32) 16.01.2017                           | B.V.                                       | (54) CUTTING DEVICE FOR A NONWOVEN    |
| (33) China                                | (72) RIETBERGEN, Mark                      | FABRIC WINDER AND METHOD FOR          |
| (51) B65G 67/20                           | (31) 15160687                              | SAME                                  |
| (11) EP3046860                            | (32) 25.03.2015                            | (73) Trützschler GmbH & Co. KG        |
| (21) EP14846154.4                         | (33) European Patent Office (EPO)          | (72) Hachmann, Andreas                |
| (47) 07.07.2021                           | (51) B65H 18/00                            | Hübinger, Andreas                     |
| (87) FI2014050706                         | B65H 18/08                                 | Schütt, Philipp                       |
| 26.03.2015                                | B65H 54/00                                 | (31) 102017111365                     |
| (22) 16.09.2014                           | B65H 54/02                                 | (32) 24.05.2017                       |
| (54) TRANSFER PLATE FOR LOADING A         | B65H 54/06                                 | (33) Germany                          |
| CARGO SPACE                               | B65H 54/28                                 | (51) B65H 29/30                       |
| (73) Actiw OY                             | B65H 55/04                                 | B65H 29/32                            |
| (72) AUVINEN, Janne                       | B65H 61/00                                 | B65H 29/58                            |
| UTRIAINEN, Otto                           | G01B 11/00                                 | B65H 31/10                            |
| (31) 20135931                             | G01B 11/08                                 | B65H 31/20                            |
| (32) 17.09.2013                           | G01B 11/10                                 | B65H 31/30                            |
| (33) Finland                              | (11) EP3609825                             | B65H 33/08                            |
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| (47) 07.07.2021                     | (51) B65H 63/06                   | (51) B66B 1/30                  |
| (87) EP2018053300                   | D03D 47/30                        | B66B 1/32                       |
| 30.08.2018                          | D03D 51/34                        | B66B 1/34                       |
| (22) 09.02.2018                     | G01N 21/89                        | H02P 23/06                      |
| (54) METHOD AND DEVICE FOR STACKING | (11) EP3676432                    | (11) EP3408204                  |
| TWO-DIMENSIONAL MATERIAL            | (21) EP18755847.3                 | (21) EP17744983.2               |
| SHEETS, AND PRINTING AND/OR         | (47) 14.07.2021                   | (47) 14.07.2021                 |
| COATING MACHINE                     | (87) EP2018072915                 | (87) US2017015365               |
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| (72) MICHEL, Björn                  | (22) 24.08.2018                   | (22) 27.01.2017                 |
| (31) 102017202749                   | (54) SENSOR SYSTEM FOR A WEAVING  | (54) METHOD AND APPARATUS FOR   |
| 102017202748                        | MACHINE                           | CONTROLLING MOTION IN A         |
| (32) 21.02.2017                     | (73) Picanol                      | COUNTERBALANCING SYSTEM         |
| 21.02.2017                          | (72) WUYTS, Elise                 | (73) Magnetek Inc.              |
| (33) Germany                        | DECONINCK, Filip                  | (72) ANDERSON, Garry            |
| Germany                             | (31) 201700118                    | KOBISKE, Mark                   |
| (51) B65H 29/58                     | (32) 31.08.2017                   | BACKMAN, John                   |
| G03G 15/00                          | (33) Belgium                      | BUTTE, Ed                       |
| H04N 1/00                           | (51) B65H 69/06                   | (31) 201662288776 P             |
| H04N 1/04                           | D03D 13/00                        | (32) 29.01.2016                 |
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| (47) 07.07.2021                     | D03J 1/04                         | H02J 7/00                       |
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| (54) IMAGE FORMING APPARATUS        | (21) EP18202676.5                 | (11) EP3366625                  |
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| (72) KATO, Hiroshi                  | (22) 24.01.2013                   | (47) 14.07.2021                 |
| OGATA, Atsushi                      | (54) WEAVING SYSTEM COMPRISING    | (22) 22.02.2017                 |
| KANEKO, Daisuke                     | INTERMITTENT WEAVING SPLICER      | (54) POWER CONTROL SYSTEM FOR A |
| INO, Kazushi                        | (73) NIKE Innovate C.V.           | BATTERY DRIVEN ELEVATOR         |
| IWAKOSHI, Tomoyuki                  | (72) DUA, Bhupesh                 | (73) Otis Elevator Company      |
| YASUMARU, Ichiro                    | CROSS, Tory M.                    | (72) AGIRMAN, Ismail            |
| AOKI, Masaru                        | (31) 201261590177 P               | DEHMLow, Marvin                 |
| (31) 2012106151                     | (32) 24.01.2012                   | FISCHER, Bernd                  |
| (32) 07.05.2012                     | (33) United States of America     | MEZZADRI, Carlo                 |
| (33) Japan                          | (51) B66B 1/06                    | (51) B66B 1/32                  |
| (51) B65H 51/005                    | B66B 1/34                         | B66B 5/02                       |
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| D02J 1/18                           | (11) EP3083465                    | (21) EP19165135.5               |
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| (47) 14.07.2021                     | (87) US2013075615                 | (54) ELEVATOR SYSTEM            |
| (22) 05.06.2017                     | 25.06.2015                        | (73) KONE Corporation           |
| (54) FIBRE SPREADING                | (22) 17.12.2013                   | (72) LAAKSONHEIMO, Jyrki        |
| (73) Fernando, Gerard               | (54) ELEVATOR CONTROL WITH MOBILE | KATTAINEN, Ari                  |
| (72) FERNANDO, Gerard               | DEVICES                           | (31) 20090081                   |
| MACHAVARAM, Venkata                 | (73) Otis Elevator Company        | (32) 05.03.2009                 |
| (31) 201609919                      | (72) PETERSON, Eric C.            | (33) Finland                    |
| (32) 07.06.2016                     | SIMCIK, Paul A.                   | (51) B66B 1/34                  |
| (33) United Kingdom                 | CHAPMAN, Ashley                   | (11) EP3625160                  |
| (51) B65H 54/58                     | ENCINAS CARRENO, Luis C.          | (21) EP18721073.7               |
| B65H 54/71                          | SCOVILLE, Bradley Armand          | (47) 07.07.2021                 |
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| (47) 14.07.2021                     | (11) EP3738914                    | (54) SYSTEM AND METHOD FOR      |
| (22) 17.04.2019                     | (21) EP20174710.2                 | DETERMINING THE POSITION OF AN  |
| (54) WINDING UNIT AND SPIRAL        | (47) 07.07.2021                   | ELEVATOR CAR OF A LIFT ASSEMBLY |
| ELECTRIC WIRE MANUFACTURING         | (22) 14.05.2020                   | (73) Inventio AG                |
| METHOD                              | (54) LIFT PLATFORM AND HOME LIFT  | (72) BITZI, Raphael             |
| (73) YAZAKI CORPORATION             | COMPRISING THE LIFT PLATFORM      | SCHERRER, Daniel                |
| (72) KATO, Yasunori                 | (73) Lifting Italia S.r.l.        | RÜEGG, André                    |
| TAKADA, Kazuhiko                    | (72) MATTIOLI, Riccardo           | BROSSI, Steven                  |
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| B66B 13/26                        | (21) EP18725563.3                 | (87) EP2014060888                 |
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| (21) EP16151907.9                 | (87) EP2018063899                 | (22) 27.05.2014                   |
| (47) 07.07.2021                   | 06.12.2018                        | (54) ELEVATOR DOOR WITH A DOOR    |
| (22) 19.01.2016                   | (22) 28.05.2018                   | CONTACT SWITCH                    |
| (54) METHOD FOR CONTROLLING       | (54) ADD-ON PLATFORM TO A WORK    | (73) Inventio AG                  |
| A CLOSING OPERATION OF AN         | PLATFORM                          | (72) MÜLLER, Rudolf J.            |
| ELEVATOR DOOR OF AN ELEVATOR      | (73) Inventio AG                  | BIRNER, Eric                      |
| CABIN                             | (72) GARBERS, Olaf                | (31) 13169531                     |
| (73) Inventio AG                  | HOFER, Philip                     | (32) 28.05.2013                   |
| (72) BONOMI, Pietro               | SCHMID, Frankie                   | (33) European Patent Office (EPO) |
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| (54) ELEVATOR DOOR SYSTEM AND A   | (11) EP3569550                    | (22) 12.10.2018                   |
| METHOD FOR CALLING AN ELEVATOR    | (21) EP19175248.4                 | (54) ELEVATOR LANDING DOOR        |
| CAR                               | (47) 07.07.2021                   | UNLOCKING SYSTEM                  |
| (73) Inventio AG                  | (22) 17.05.2019                   | (73) Otis Elevator Company        |
| (72) HEGDE, Anusha                | (54) LIFT                         | (72) MONTIGNY, Guillaume          |
| HAWARE, Shreyas                   | (73) Otis Elevator Company        | FOUGERON, Sebastien               |
| (51) B66B 1/46                    | (72) JIANG, Mingming              | BADAOU, Amine                     |
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| (54) METHOD AND DEVICE FOR        | D07B 1/22                         | (22) 13.11.2018                   |
| ASSOCIATING USER PREFERENCES      | D07B 5/10                         | (54) ELEVATOR WITH ACTIVELY       |
| WITH ELEVATOR ACTIVITY            | (11) EP2240395                    | CONTROLLED MECHANISM FOR          |
| (73) Inventio AG                  | (21) EP09702385.7                 | UNLOCKING SHAFT DOORS             |
| (72) NOWEL, Edward                | (47) 14.07.2021                   | (73) Inventio AG                  |
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| (51) B66B 5/00                    | (54) ROPE FOR A HOISTING MACHINE, | (33) European Patent Office (EPO) |
| (11) EP3292063                    | ELEVATOR AND USE                  | (51) B66B 19/00                   |
| (21) EP15766575.3                 | (73) Kone Corporation             | (11) EP3691985                    |
| (47) 14.07.2021                   | (72) PELTO-HUIKKO, Raimo          | (21) EP18768918.7                 |
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| (54) ELEVATOR SYSTEM HOISTWAY     | (31) 20080045                     | (22) 19.09.2018                   |
| ACCESS CONTROL                    | 20080538                          | (54) METHOD FOR CONSTRUCTING A    |
| (73) Otis Elevator Company        | (32) 18.01.2008                   | LIFT ASSEMBLY WITH INCREASING     |
| (72) FAUCCONNET, Aurélien         | 25.09.2008                        | USABLE LIFTING HEIGHT             |
| REBILLARD, Pascal                 | (33) Finland                      | (73) Inventio AG                  |
| (51) B66B 5/00                    | Finland                           | (72) CHRISTEN, Lukas              |
| B66B 5/02                         | (51) B66B 11/00                   | BLÄSI, Pascal                     |
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| (21) EP17199268.8                 | (11) EP3356275                    | BIZZAZERO, Gabriele               |
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| (54) COMMUNICATION WITH A         | (87) IB2015001976                 | (33) European Patent Office (EPO) |
| PASSENGER IN A TRANSPORTATION     | 06.04.2017                        | (51) B66B 19/00                   |
| SYSTEM                            | (22) 30.09.2015                   | E04G 1/36                         |
| (73) Otis Elevator Company        | (54) INTEGRATED ELEVATOR AND AIR  | E04G 3/18                         |
| (72) JYOTIK, Ashwini Ramarao      | CONDITIONING SYSTEM               | (11) EP3631119                    |
| HALINGALE, Paras Kumar            | (73) Carrier Corporation          | (21) EP18726158.1                 |
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| (73) Inventio AG                                                                                     | (47) 07.07.2021                                | (21) EP15193106.0                                                                         |
| (72) GARBERS, Olaf                                                                                   | (22) 19.12.2014                                | (47) 07.07.2021                                                                           |
| HOFFER, Philip                                                                                       | (54) Straddle carrier                          | (22) 05.11.2015                                                                           |
| SCHMID, Frankie                                                                                      | (73) Konecranes Global Corporation             | (54) CRANE AND SUPPORTING UNIT FOR SUCH A CRANE                                           |
| (31) 17174307                                                                                        | (72) Bauer, Reinhard                           | (73) Tadano Demag GmbH                                                                    |
| (32) 02.06.2017                                                                                      | (31) 202014000158 U                            | (72) Zwifka, Martin                                                                       |
| (33) European Patent Office (EPO)                                                                    | (32) 14.01.2014                                | Schaal, Benjamin                                                                          |
| (51) B66C 5/00                                                                                       | (33) Germany                                   | Köster, Fritz-Botho                                                                       |
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| (54) BRIDGE CRANE INSTALLATION                                                                       | (11) EP3543546                                 | E04G 21/02                                                                                |
| (73) IWS System GmbH                                                                                 | (21) EP16925872.0                              | E04G 21/04                                                                                |
| (72) Heiko, Petzold                                                                                  | (47) 07.07.2021                                | (11) EP2733281                                                                            |
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| E01B 9/46                                                                                            | (72) SHAN, Zenghai                             | (54) PUMP TRUCK AND CONTROL METHOD AND DEVICE THEREOF                                     |
| (11) EP3329048                                                                                       | DONG, Quan                                     | (73) Zoomlion Heavy Industry Science and Technology Co., Ltd.                             |
| (21) EP16747569.8                                                                                    | LIU, Donghong                                  | Hunan Zoomlion Special Vehicle Co., Ltd.                                                  |
| (47) 14.07.2021                                                                                      | XIANG, Xiaoqiang                               | (72) WU, Binxing                                                                          |
| (87) GB2016052302                                                                                    | ZHANG, Zhengde                                 | LI, Xuejun                                                                                |
| 02.02.2017                                                                                           | DENG, Yongjian                                 | YI, Weichun                                                                               |
| (22) 27.07.2016                                                                                      | WANG, Shuai                                    | LI, Kuifang                                                                               |
| (54) RAIL FASTENING DEVICE                                                                           | HU, Xiaodong                                   | YUE, Hongxu                                                                               |
| (73) Gantry Railing Ltd                                                                              | DU, Xiaojie                                    | (31) 201110197427                                                                         |
| (72) BYGRAVE, Peter Nathan                                                                           | ZHONG, Weichao                                 | (32) 14.07.2011                                                                           |
| ENGERT, Stephen David                                                                                | HAN, Jianying                                  | (33) China                                                                                |
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| United Kingdom                                                                                       | F16M 13/02                                     | (54) Working range diagram-display apparatus                                              |
| (51) B66C 13/16                                                                                      | (11) EP2935973                                 | (73) Tadano Ltd.                                                                          |
| B66C 23/90                                                                                           | (21) EP13767150.9                              | (72) Oshima, Masanori                                                                     |
| G01G 19/08                                                                                           | (47) 07.07.2021                                | Kumano, Kaori                                                                             |
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| (73) Liebherr-Werk Nenzing GmbH                                                                      | (72) SCHINKEL, Michaël Hubert                  | (47) 07.07.2021                                                                           |
| (72) Schwarzhans, Dr. Andreas                                                                        | SCHINKEL, Edouard Frans Alexander              | (87) EP2018061107                                                                         |
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| (33) Germany                                                                                         | (51) B66C 23/36                                | (73) CNH Industrial Italia S.p.A.                                                         |
| (51) B66C 13/18                                                                                      | B66C 23/50                                     | (72) BENEVELLI, Alessandro                                                                |
| B66C 13/22                                                                                           | (11) EP3461785                                 | CRISTOFORI, Davide                                                                        |
| B66C 19/00                                                                                           | (21) EP18020407.5                              | NOTARNICOLA, Giovanni                                                                     |
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| F01K 23/06                                                                                           | (22) 23.08.2018                                | (32) 03.05.2017                                                                           |
| F02B 63/04                                                                                           | (54) CRANE                                     | (33) Italy                                                                                |
| F02G 5/02                                                                                            | (73) Biedenbach, Walter                        |                                                                                           |
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|                                                                                                      | (33) Germany                                   |                                                                                           |
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| (54) MICRO-POROUS ELECTRODE                | FLOW OF A FLUID AND METHOD FOR             | 05.08.2011                           |
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| LIN, Jianxun                               | GAUDET, Matthieu                           | European Patent Office (EPO)         |
| YUN, Quanxin                               | SCHIMMANZ, Klaus                           | United States of America             |
| XIANG, Shaohua                             | LANGA, Sergiu                              | United States of America             |
| DRMANAC, Radoje                            | KAISER, Bert                               | European Patent Office (EPO)         |
| DRMANAC, Snezana                           | (31) 102015210919                          | European Patent Office (EPO)         |
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| (47) 07.07.2021                            | SYSTEM (MEMS) PACKAGE                      | H01L 33/18                           |
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| (54) OVERMOLDED LEAD FRAME                 | Systemtechnik Aktiengesellschaft           | (21) EP11838840.4                    |
| ASSEMBLY FOR PRESSURE SENSING              | (72) LEITGEB, Markus                       | (47) 07.07.2021                      |
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| HERRON, Andrew C.                          | (51) B82Y 5/00                             | WITH MONOLITHICALLY INTEGRATED       |
| (31) 201815995594                          | A61K 31/435                                | QUANTUM DOT DEVICES AND              |
| (32) 01.06.2018                            | A61K 31/444                                | METHOD OF MANUFACTURE                |
| (33) United States of America              | A61K 31/704                                | THEREOF                              |
| (51) B81C 1/00                             | A61K 38/05                                 | (73) De Rochemont, L. Pierre         |
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| ABSORPTION CELLS WITH HIGH-                | (21) EP12725514.9                          | (21) EP17305414.9                    |
| PURITY ALKALI METAL                        | (47) 14.07.2021                            | (47) 14.07.2021                      |
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| (72) ZHU, Jian                             | (54) BIO-ORTHOGONAL DRUG                   | ONE FOCUSED BEAM IN A NEAR           |
| HELL, Erwin                                | ACTIVATION                                 | ZONE                                 |
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| (33) China                                 | JANSSEN, Henricus, Marie                   | SEIFI, Mozhdeh                       |
| (51) B81C 1/00                             | TEN HOEVE, Wolter                          | (51) B82Y 20/00                      |
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| (72) Edmond, John Adam            | 14.09.2017                     | LEE, Je Gwon                        |
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| Kong, Hua-Shuang                  | (54) PHOSPHORESCENT FERRO-     | YOON, Sung Soo                      |
| Bergmann, Michael John            | MAGNETIC PARTICLE FORMULATION  | (31) 20130151866                    |
| Emerson, David Todd               | AND METHOD OF NON-DESTRUCTIVE  | 20130151865                         |
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| (54) NANOPARTICLES FOR USE IN     | (11) EP3202797                 | C10G 11/18                          |
| BIOADHESION                       | (21) EP15845928.9              | C10G 47/00                          |
| (73) ESPCI PARISTECH              | (47) 07.07.2021                | C10G 47/20                          |
| (72) MARCELLAN, Alba              | (87) KR2015010313              | C10J 3/46                           |
| LEIBLER, Ludwik                   | 07.04.2016                     | C10J 3/50                           |
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| (51) B82Y 30/00                   | (72) LEE, Je Gwon              | (22) 19.08.2016                     |
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| F24C 7/02                         | KIM, Jung Keun                 | SYNGAS THROUGH REGENERATION         |
| H05B 6/64                         | KU, Se Jin                     | OF COKED CRACKING AGENT             |
| (11) EP3497372                    | LEE, Mi Sook                   | (73) Indian Oil Corporation Limited |
| (21) EP16912836.0                 | CHOI, Eun Young                | (72) Mukthiyar, Sadhullah           |
| (47) 07.07.2021                   | YOON, Sung Soo                 | Bhanuprasad, Sayapaneni Gopinath    |
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| (54) DIVIDER ASSEMBLY FOR A       | (32) 30.09.2014                | Kumaran, Satheesh Vetterkunnel      |
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| (72) KHIZAR, Muhammad             | Korea (Republic)               | Bhattacharyya, Debasis              |
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| C08L 77/00                        | C08F 212/32                    | (22) 16.05.2019                     |
| C09C 1/24                         | C08F 220/10                    | (54) METHOD FOR PRODUCING           |
| C09C 3/10                         | C08F 220/30                    | BOROHYDRIDE SALTS                   |
| C09D 133/00                       | C08F 293/00                    | (73) Helmholtz-Zentrum hereon GmbH  |
| C09D 133/08                       | C09D 153/00                    | (72) Pistidda, Claudio              |
| C09D 177/02                       | G03F 7/00                      | Le, Thi Thu                         |

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| Dornheim, Martin                            | China                                          | (51) C01B 33/14                      |
| Klassen, Thomas                             | (51) C01B 32/23                                | C01B 33/141                          |
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| C01B 25/30                                  | (21) EP18716356.3                              | C01B 33/155                          |
| H01M 10/052                                 | (47) 14.07.2021                                | C01B 33/158                          |
| H01M 10/0562                                | (87) IB2018052041                              | (11) EP3284719                       |
| H01M 50/409                                 | 04.10.2018                                     | (21) EP16780217.2                    |
| (11) EP3557658                              | (22) 26.03.2018                                | (47) 07.07.2021                      |
| (21) EP19169030.4                           | (54) A METHOD FOR THE MANUFACTURE              | (87) KR2016003152                    |
| (47) 14.07.2021                             | OF REDUCED GRAPHENE OXIDE                      | 20.10.2016                           |
| (22) 12.04.2019                             | FROM KISH GRAPHITE                             | (22) 28.03.2016                      |
| (54) SOLID ELECTROLYTE FOR BATTERY          | (73) Arcelormittal                             | (54) METHOD FOR MANUFACTURING        |
| (73) Commissariat à l'Energie Atomique et   | (72) VU, Thi Tan                               | SILICA AEROGEL-CONTAINING            |
| aux Energies Alternatives                   | CABANAS CORRALES, Maria                        | BLANKET                              |
| Institut Polytechnique de Grenoble          | ALVAREZ-ALVAREZ, Abel                          | (73) LG Chem, Ltd.                   |
| (72) MORIN, Pierrick                        | (31) PCT/IB2017/000348                         | (72) OH, Kyoung Shil                 |
| BENAYAD, Anass                              | (32) 31.03.2017                                | KIM, Mi Ri                           |
| BOUCHET, Renaud                             | (33) World Intellectual Property Office (WIPO) | LEE, Je Kyun                         |
| LE VAN-JODIN, Lucie                         | (51) C01B 33/023                               | (31) 20150052537                     |
| (31) 1853486                                | C23C 20/06                                     | 20160035850                          |
| (32) 20.04.2018                             | H01M 4/36                                      | (32) 14.04.2015                      |
| (33) France                                 | H01M 4/38                                      | 25.03.2016                           |
| (51) C01B 25/45                             | H01M 4/62                                      | (33) Korea (Republic)                |
| C01B 25/455                                 | H01M 4/74                                      | Korea (Republic)                     |
| H01M 4/58                                   | H01M 4/13                                      | (51) C01B 35/12                      |
| H01M 10/054                                 | H01M 4/134                                     | C30B 7/04                            |
| (11) EP3534443                              | H01M 10/0525                                   | C30B 7/10                            |
| (21) EP17873670.8                           | (11) EP3507242                                 | C30B 9/12                            |
| (47) 14.07.2021                             | (21) EP17847651.1                              | C30B 11/00                           |
| (87) JP2017041726                           | (47) 14.07.2021                                | C30B 15/00                           |
| 31.05.2018                                  | (87) US2017049950                              | C30B 17/00                           |
| (22) 20.11.2017                             | 08.03.2018                                     | C30B 29/10                           |
| (54) USE OF A POSITIVE ELECTRODE            | (22) 01.09.2017                                | G02F 1/355                           |
| ACTIVE MATERIAL FOR POTASSIUM               | (54) NANO-SCALE/NANOSTRUCTURED                 | (11) EP3620555                       |
| ION BATTERY AND USE OF A                    | SI COATING ON VALVE METAL                      | (21) EP17904829.3                    |
| POSITIVE ELECTRODE FOR                      | SUBSTRATE FOR LIB ANODES                       | (47) 07.07.2021                      |
| POTASSIUM ION BATTERY                       | (73) COMPOSITE MATERIALS                       | (87) CN2017092331                    |
| (73) Tokyo University of Science Foundation | TECHNOLOGY, Inc.                               | 11.10.2018                           |
| (72) KOMABA, Shinichi                       | (72) WONG, James                               | (22) 10.07.2017                      |
| KUBOTA, Kei                                 | FROST, David                                   | (54) COMPOUND OF CESIUM              |
| CHIHARA, Kuniko                             | (31) 201662382696 P                            | FLUOROOXOBORATE, NON-LINEAR          |
| KATOGLI, Akihiro                            | (32) 01.09.2016                                | OPTICAL CRYSTAL OF CESIUM            |
| (31) 2016229130                             | (33) United States of America                  | FLUOROOXOBORATE, PREPARATION         |
| (32) 25.11.2016                             | (51) C01B 33/12                                | METHOD THEREFOR AND USE              |
| (33) Japan                                  | C08G 77/62                                     | THEREOF                              |
| (51) C01B 32/184                            | C08L 83/16                                     | (73) Xinjiang Technical Institute Of |
| C01B 32/194                                 | C09D 183/16                                    | Physics&Chemistry, Chinese Academy   |
| C01B 32/198                                 | H01L 21/312                                    | Of Sciences                          |
| (11) EP3620435                              | (11) EP3135711                                 | (72) PAN, Shilie                     |
| (21) EP18866208.4                           | (21) EP15782818.7                              | WANG, Xuefei                         |
| (47) 07.07.2021                             | (47) 07.07.2021                                | ZHANG, Fangfang                      |
| (87) CN2018086085                           | (87) JP2015062219                              | WANG, Ying                           |
| 18.04.2019                                  | 29.10.2015                                     | (31) 201710215337                    |
| (22) 08.05.2018                             | (22) 22.04.2015                                | (32) 03.04.2017                      |
| (54) INDEPENDENT FREE-STANDING              | (54) COPOLYMERIZED POLYSILAZANE,               | (33) China                           |
| GRAPHENE FILM AND PREPARATION               | MANUFACTURING METHOD                           | (51) C01F 7/00                       |
| METHOD THEREFOR                             | THEREFOR, COMPOSITION                          | C04B 35/111                          |
| (73) Zhejiang University                    | COMPRISING SAME, AND METHOD                    | C04B 35/115                          |
| (72) GAO, Chao                              | FOR FORMING SILICEOUS FILM                     | C04B 35/505                          |
| PENG, Li                                    | USING SAME                                     | C01F 17/00                           |
| (31) 201710955058                           | (73) Merck Patent GmbH                         | (11) EP3676234                       |
| 201710953503                                | (72) YAMAKAWA, Jun                             | (21) EP18800714.0                    |
| 201710953513                                | FUJIWARA, Takashi                              | (47) 07.07.2021                      |
| (32) 13.10.2017                             | KANDA, Takashi                                 | (87) FR2018052623                    |
| 13.10.2017                                  | AOKI, Hiroyuki                                 | 02.05.2019                           |
| 13.10.2017                                  | (31) 2014089831                                | (22) 22.10.2018                      |

|                                                                                                                                                                                                                                                                                      |                                                                                                                                     |                                                                                                                                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| (54) METHOD FOR PREPARING A POWDER BASED ON OXIDE(S) OF YTTRIUM, OF ALUMINIUM AND OPTIONALLY OF AT LEAST ONE OTHER ELEMENT                                                                                                                                                           | (32) 22.07.2014<br>13.03.2015<br>(33) United States of America<br>United States of America                                          | (33) European Patent Office (EPO)                                                                                                             |
| (73) Commissariat à l'Energie Atomique et aux Energies Alternatives                                                                                                                                                                                                                  | (51) C01G 49/00<br>C04B 35/36<br>C08K 3/22<br>C08L 101/00<br>C30B 29/22<br>H01F 1/36<br>H01F 1/37                                   | (51) C02F 3/00<br>C02F 3/12<br>C02F 11/04<br>C02F 11/18<br>C12M 1/107<br>C12N 1/00<br>C02F 11/12                                              |
| (72) DELAHAYE, Thibaud<br>LEBLANC, Martin<br>MIRA, Sarah                                                                                                                                                                                                                             | (11) EP3438054<br>(21) EP17773863.0<br>(47) 14.07.2021<br>(87) JP2017006527<br>05.10.2017<br>(22) 22.02.2017                        | (11) EP3508457<br>(21) EP17845981.4<br>(47) 07.07.2021<br>(87) JP2017027403<br>08.03.2018<br>(22) 28.07.2017                                  |
| (31) 1759996<br>(32) 23.10.2017<br>(33) France                                                                                                                                                                                                                                       | (37) 14.07.2021<br>(87) JP2017006527<br>05.10.2017<br>(22) 22.02.2017                                                               | (47) 07.07.2021<br>(87) JP2017027403<br>08.03.2018<br>(22) 28.07.2017                                                                         |
| (51) C01G 19/02<br>G02B 1/04<br>G02B 1/16                                                                                                                                                                                                                                            | (54) FERRITE PARTICLES, RESIN COMPOSITION, AND RESIN FILM                                                                           | (54) ORGANIC WASTEWATER TREATMENT METHOD AND ORGANIC WASTEWATER TREATMENT DEVICE                                                              |
| (11) EP2996986<br>(21) EP13884650.6<br>(47) 07.07.2021<br>(87) CN2013075609<br>20.11.2014<br>(22) 14.05.2013                                                                                                                                                                         | (73) Powdertech Co., Ltd.<br>(72) KOJIMA, Takashi<br>ISHII, Kazutaka<br>SUGIURA, Takao<br>IGARASHI, Tetsuya<br>AGA, Koji            | (73) Metawater Co., Ltd.<br>The University of Kitakyushu<br>(72) YASUI, Hidenari<br>TERASHIMA, Mitsuharu<br>YANASE, Tetsuya<br>NOIRI, Natsumi |
| (54) FLUORINE-DOPED STANNIC OXIDE COLLOIDS AND METHOD FOR PREPARING SAME                                                                                                                                                                                                             | (31) 2016070280<br>(32) 31.03.2016<br>(33) Japan                                                                                    | (31) 2016172266<br>(32) 02.09.2016<br>(33) Japan                                                                                              |
| (73) Essilor International<br>Shanghai University                                                                                                                                                                                                                                    | (51) C02F 1/00<br>C02F 1/52<br>C02F 1/56<br>C02F 103/06<br>C02F 103/30<br>C02F 103/32<br>G01N 21/33<br>C02F 11/14                   | (51) C02F 3/12<br>C02F 3/20<br>C02F 3/30                                                                                                      |
| (72) PEGA, Stéphanie<br>ZHAO, Jian<br>SHI, Liyi<br>YUAN, Shuai<br>WANG, Zhuyi<br>ZHAO, Yin                                                                                                                                                                                           | (11) EP2828640<br>(21) EP13763725.2<br>(47) 07.07.2021<br>(87) CA2013050216<br>26.09.2013<br>(22) 15.03.2013                        | (11) EP3344587<br>(21) EP15902699.6<br>(47) 07.07.2021<br>(87) CN2015091153<br>09.03.2017<br>(22) 30.09.2015                                  |
| (51) C01G 45/12<br>C01G 51/00<br>C01G 51/04<br>C01G 53/00<br>C01G 53/04<br>C25D 3/66<br>C25D 9/06<br>C25D 9/08<br>C25D 21/02<br>H01M 4/02<br>H01M 4/04<br>H01M 4/66<br>H01M 4/74<br>H01M 4/80<br>H01M 4/131<br>H01M 4/1391<br>H01M 4/485<br>H01M 4/525<br>H01M 4/587<br>H01M 10/0525 | (54) PROCESSES for regulation and monitoring of an amount of flocculating agent added to a process stream                           | (54) METHOD AND SYSTEM FOR WASTEWATER TREATMENT USING MEMBRANE BIOREACTOR                                                                     |
| (11) EP3172169<br>(21) EP15825174.4<br>(47) 14.07.2021<br>(87) US2015041520<br>28.01.2016<br>(22) 22.07.2015                                                                                                                                                                         | (73) Ormeci Beckers, Banu<br>(72) Ormeci Beckers, Banu<br>(31) 201261612923 P<br>(32) 19.03.2012<br>(33) United States of America   | (73) Jiangxi JDL Environmental Protection Co., Ltd.<br>(72) LIAO, Zhimin<br>ZHOU, Tao<br>(31) 201510556544<br>(32) 01.09.2015<br>(33) China   |
| (54) LITHIATED TRANSITION METAL OXIDES                                                                                                                                                                                                                                               | (51) C02F 1/32<br>H01L 33/52<br>H01L 33/58                                                                                          | (51) C02F 11/10<br>C02F 11/18<br>C10L 9/08                                                                                                    |
| (73) Xerion Advanced Battery Corp.                                                                                                                                                                                                                                                   | (11) EP3271295<br>(21) EP16709405.1<br>(47) 07.07.2021<br>(87) EP2016055130<br>29.09.2016<br>(22) 10.03.2016                        | (11) EP3475397<br>(21) EP17815818.4<br>(47) 14.07.2021<br>(87) SE2017050681<br>28.12.2017<br>(22) 21.06.2017                                  |
| (72) ZHANG, Huigang<br>BUSBEE, John D.<br>NING, Hailong<br>ARPIN, Kevin A.                                                                                                                                                                                                           | (54) UV-C WATER PURIFICATION DEVICE                                                                                                 | (54) METHOD FOR OXIDATION OF A LIQUID PHASE IN A HYDROTHERMAL CARBONIZATION PROCESS                                                           |
| (31) 201462027550 P<br>201562132871 P                                                                                                                                                                                                                                                | (73) Signify Holding B.V.<br>(72) HAYASHI, Daiyu<br>YU, Jianghong<br>DIJKSTRA, Paul<br>VAN DER MEER, Michiel<br>HOVESTAD, Arie, Jan | (73) C-Green Technology AB<br>(72) LUNDQVIST, Fredrik<br>ODÉN, Erik<br>ÖHMAN, Fredrik                                                         |
|                                                                                                                                                                                                                                                                                      | (31) 15160017<br>(32) 20.03.2015                                                                                                    | (31) 1650902<br>1750565<br>(32) 23.06.2016<br>08.05.2017<br>(33) Sweden<br>Sweden                                                             |
|                                                                                                                                                                                                                                                                                      |                                                                                                                                     | (51) C03B 5/20                                                                                                                                |



|                                          |                                   |                                               |
|------------------------------------------|-----------------------------------|-----------------------------------------------|
| C03B 5/225                               | (73) SAINT-GOBAIN GLASS FRANCE    | C03C 21/00                                    |
| C04B 38/00                               | (72) FREBOURG, Philippe           | (11) EP3392217                                |
| C04B 38/06                               | THELLIER, Hervé                   | (21) EP18173624.0                             |
| (11) EP3114093                           | OLIVIER, Thierry                  | (47) 07.07.2021                               |
| (21) EP15710662.6                        | (31) 1661720                      | (22) 29.08.2016                               |
| (47) 14.07.2021                          | (32) 30.11.2016                   | (54) CHEMICALLY RESISTANT GLASS AND           |
| (87) US2015017957                        | (33) France                       | ITS USE                                       |
| 11.09.2015                               | (51) C03B 27/04                   | (73) Schott AG                                |
| (22) 27.02.2015                          | C03B 27/044                       | (72) Schwall, Michael                         |
| (54) PROCESS AND APPARATUS FOR           | C03B 27/048                       | Pawlowski, Edgar                              |
| REFINING MOLTEN GLASS                    | (11) EP3246295                    | (31) 102015116097                             |
| (73) Owens-Brockway Glass Container INC. | (21) EP16169900.4                 | (32) 23.09.2015                               |
| (72) CLARK, Terence, J.                  | (47) 07.07.2021                   | (33) Germany                                  |
| (31) 201414198083                        | (22) 17.05.2016                   | (51) C03C 3/095                               |
| (32) 05.03.2014                          | (54) METHOD FOR TEMPERING GLASS   | C03C 13/00                                    |
| (33) United States of America            | SHEETS                            | (11) EP3022163                                |
| (51) C03B 9/41                           | (73) Glaston Finland Oy           | (21) EP14748034.7                             |
| G05B 15/02                               | (72) Kylväjä, Harri               | (47) 07.07.2021                               |
| (11) EP3519364                           | (51) C03C 3/085                   | (87) US2014046637                             |
| (21) EP17795081.3                        | C03C 3/087                        | 22.01.2015                                    |
| (47) 07.07.2021                          | C03C 4/08                         | (22) 15.07.2014                               |
| (87) PL2017000097                        | C03C 4/10                         | (54) GLASS COMPOSITIONS, FIBERIZABLE          |
| 05.04.2018                               | C03C 10/00                        | GLASS COMPOSITIONS, AND GLASS                 |
| (22) 28.09.2017                          | C03C 10/12                        | FIBERS MADE THEREFROM                         |
| (54) METHOD AND SYSTEM FOR               | (11) EP2435377                    | (73) Electric Glass Fiber America, LLC        |
| CONTROLLING THE MOULD COOLING            | (21) EP10728836.7                 | (72) LI, Hong                                 |
| PROCESS DURING FORMING OF                | (47) 14.07.2021                   | WESTBROOK, Paul A.                            |
| GLASS CONTAINERS                         | (87) FR2010051028                 | (31) 201361846266 P                           |
| (73) LWN Construction Sp. z o.o.         | 02.12.2010                        | 201414325854                                  |
| (72) PINDA, Aleksander                   | (22) 28.05.2010                   | (32) 15.07.2013                               |
| (31) 41889316                            | (54) GLASS-CERAMIC PLATE          | 08.07.2014                                    |
| (32) 28.09.2016                          | (73) Eurokera S.N.C.              | (33) United States of America                 |
| (33) Poland                              | (72) BRUNET, Edouard              | United States of America                      |
| (51) C03B 23/023                         | CHOPINET, Marie, Hélène           | (51) C03C 4/00                                |
| C03B 29/08                               | (31) 0953558                      | (11) EP2868634                                |
| C03B 35/16                               | 0954620                           | (21) EP13191689.2                             |
| C03B 35/20                               | 1052474                           | (47) 07.07.2021                               |
| C03B 40/00                               | (32) 29.05.2009                   | (22) 05.11.2013                               |
| (11) EP3004000                           | 03.07.2009                        | (54) Lithium disilicate apatite glass ceramic |
| (21) EP14732058.4                        | 01.04.2010                        | with transition metal oxide                   |
| (47) 07.07.2021                          | (33) France                       | (73) Ivoclar Vivadent AG                      |
| (87) US2014038918                        | France                            | (72) Rampf, Markus                            |
| 04.12.2014                               | France                            | Ritzberger, Christian                         |
| (22) 21.05.2014                          | (51) C03C 3/087                   | Schweiger, Marcel                             |
| (54) A HEATING AND SHAPING SYSTEM        | C03C 3/091                        | Höland, Wolfram                               |
| USING MICROWAVE FOCUSED BEAM             | C03C 21/00                        | (51) C03C 17/00                               |
| HEATING                                  | (11) EP2858959                    | (11) EP2925696                                |
| (73) PPG Industries Ohio, Inc.           | (21) EP13732304.4                 | (21) EP13812255.1                             |
| (72) JIAO, Yu                            | (47) 14.07.2021                   | (47) 07.07.2021                               |
| BONADDIO, Robert M.                      | (87) US2013044686                 | (87) US2013071927                             |
| KOEPFINGER, Joseph G.                    | 12.12.2013                        | 05.06.2014                                    |
| MEDZIUS, Joseph                          | (22) 07.06.2013                   | (22) 26.11.2013                               |
| PRIDDY, James Franklin                   | (54) DELAMINATION RESISTANT GLASS | (54) REDUCED REFLECTION GLASS                 |
| SCHRIER, Russell Willis                  | CONTAINERS                        | ARTICLES AND METHODS FOR                      |
| WARREN, Dennis D.                        | (73) Corning Incorporated         | MAKING AND USING SAME                         |
| YU, Chao                                 | (72) ADIB, Kaveh                  | (73) Corning Incorporated                     |
| (31) 201313905365                        | DANIELSON, Paul, Stephen          | (72) KUKSENKOV, Dmitri, Vladislavovich        |
| (32) 30.05.2013                          | HAMILTON, James, Patrick          | (31) 201261731924 P                           |
| (33) United States of America            | MORENA, Robert, Michael           | (32) 30.11.2012                               |
| (51) C03B 23/03                          | PEANASKY, John, Stephen           | (33) United States of America                 |
| C03B 23/035                              | SCHAUT, Robert, Anthony           | (51) C03C 17/36                               |
| (11) EP3548441                           | SCHIEFFELBEIN, Susan, Lee         | (11) EP3262006                                |
| (21) EP17816919.9                        | (31) 201261656998 P               | (21) EP16713527.6                             |
| (47) 14.07.2021                          | (32) 07.06.2012                   | (47) 07.07.2021                               |
| (87) FR2017053235                        | (33) United States of America     | (87) FR2016050419                             |
| 07.06.2018                               | (51) C03C 3/087                   | 01.09.2016                                    |
| (22) 23.11.2017                          | C03C 3/112                        | (22) 23.02.2016                               |
| (54) BENDING THIN GLASS                  | C03C 4/20                         |                                               |

|                                                                                         |                                                                                          |                                                                                                                                                                                 |
|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) GLAZING COMPRISING A PROTECTIVE COATING                                            | (51) C04B 26/16                                                                          | 13.09.2018                                                                                                                                                                      |
| (73) SAINT-GOBAIN GLASS FRANCE                                                          | C04B 40/06                                                                               | (22) 05.03.2018                                                                                                                                                                 |
| (72) LORENZZI, Jean-Carlos                                                              | C04B 111/00                                                                              | (54) INORGANIC FOAM BASED ON CALCIUM SULFOALUMINATE                                                                                                                             |
| GEORGES, Benoît                                                                         | C08F 222/10                                                                              | (73) Construction Research & Technology GmbH                                                                                                                                    |
| LAURENT, Stéphane                                                                       | C09J 4/00                                                                                | De Cavis AG                                                                                                                                                                     |
| (31) 1551552                                                                            | F16B 13/14                                                                               | (72) TURCINSKAS, Sarunas                                                                                                                                                        |
| (32) 24.02.2015                                                                         | (11) EP2709963                                                                           | FEICHTENSCHLAGER, Bernhard                                                                                                                                                      |
| (33) France                                                                             | (21) EP12725935.6                                                                        | ALBRECHT, Gerhard                                                                                                                                                               |
| (51) C03C 17/36                                                                         | (47) 07.07.2021                                                                          | PETIT, Pauline                                                                                                                                                                  |
| C03C 23/00                                                                              | (87) US2012038304                                                                        | GONZENBACH, Urs                                                                                                                                                                 |
| (11) EP3365296                                                                          | 22.11.2012                                                                               | STURZENEGGER, Philip                                                                                                                                                            |
| (21) EP16791331.8                                                                       | (22) 17.05.2012                                                                          | (31) 17159443                                                                                                                                                                   |
| (47) 14.07.2021                                                                         | (54) ISOCYANURATE VINYL ESTER ANCHORING ADHESIVE COMPOSITION                             | (32) 06.03.2017                                                                                                                                                                 |
| (87) EP2016075080                                                                       | (73) Illinois Tool Works Inc.                                                            | (33) European Patent Office (EPO)                                                                                                                                               |
| 27.04.2017                                                                              | (72) ROURKE, Andrew J.                                                                   | (51) C04B 28/10                                                                                                                                                                 |
| (22) 19.10.2016                                                                         | (31) 201113110504                                                                        | C04B 40/06                                                                                                                                                                      |
| (54) FIRE RESISTANT GLAZING AND COATING FOR A FIRE RESISTANT GLASS                      | (32) 18.05.2011                                                                          | C04B 111/00                                                                                                                                                                     |
| (73) SAINT-GOBAIN GLASS FRANCE                                                          | (33) United States of America                                                            | C04B 111/28                                                                                                                                                                     |
| (72) HUHNN, Norbert                                                                     | (51) C04B 28/02                                                                          | C04B 111/52                                                                                                                                                                     |
| HAGEN, Jan                                                                              | C04B 28/04                                                                               | (11) EP3535227                                                                                                                                                                  |
| PETERSEN, Christian                                                                     | E04B 1/74                                                                                | (21) EP17800909.8                                                                                                                                                               |
| GUETTE, Mathilde                                                                        | (11) EP3613715                                                                           | (47) 14.07.2021                                                                                                                                                                 |
| (31) 15190527                                                                           | (21) EP18306128.2                                                                        | (87) FR2017053006                                                                                                                                                               |
| (32) 20.10.2015                                                                         | (47) 07.07.2021                                                                          | 11.05.2018                                                                                                                                                                      |
| (33) European Patent Office (EPO)                                                       | (22) 22.08.2018                                                                          | (22) 02.11.2017                                                                                                                                                                 |
| (51) C04B 7/36                                                                          | (54) USE OF A MINERAL FOAM FOR THE PRODUCTION OF THERMALLY INSULATED PREFABRICATED WALLS | (54) DRY CONSTRUCTION COMPOSITION WHICH CAN BE WET-SPRAYED BY MEANS OF A SCREW PUMP AND COMPRISING A BINDER AND A BIO-BASED FILLER - PREPARATION AND USES OF SUCH A COMPOSITION |
| (11) EP3672919                                                                          | (73) Holcim Technology Ltd                                                               | (73) Sika Technology AG                                                                                                                                                         |
| (21) EP18755799.6                                                                       | (72) PEREZ, Nicolas                                                                      | (72) CAPPELLARI, Marco                                                                                                                                                          |
| (47) 07.07.2021                                                                         | BLACHIER, Christian                                                                      | DESROSES, Lisa                                                                                                                                                                  |
| (87) EP2018072079                                                                       | FERREINT, Lilian                                                                         | DAUBRESSE, Anne                                                                                                                                                                 |
| 28.02.2019                                                                              | MOULIN, Adrien                                                                           | (31) 1660651                                                                                                                                                                    |
| (22) 15.08.2018                                                                         | (51) C04B 28/04                                                                          | (32) 03.11.2016                                                                                                                                                                 |
| (54) SYSTEM AND METHOD FOR PRODUCING CEMENT CLINKER                                     | C04B 111/00                                                                              | (33) France                                                                                                                                                                     |
| (73) thyssenkrupp Industrial Solutions AG                                               | A61K 6/16                                                                                | (51) C04B 28/14                                                                                                                                                                 |
| thyssenkrupp AG                                                                         | A61K 6/54                                                                                | C04B 40/00                                                                                                                                                                      |
| (72) BRINKMANN, Christian                                                               | A61K 6/69                                                                                | C04B 111/00                                                                                                                                                                     |
| ADLER, Klaus                                                                            | A61K 6/71                                                                                | (11) EP3414211                                                                                                                                                                  |
| BEILMANN, Reinhard                                                                      | A61K 6/813                                                                               | (21) EP17704228.0                                                                                                                                                               |
| (31) 102017119155                                                                       | A61K 6/851                                                                               | (47) 07.07.2021                                                                                                                                                                 |
| (32) 22.08.2017                                                                         | A61K 6/891                                                                               | (87) EP2017052708                                                                                                                                                               |
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| (51) C04B 26/04                                                                         | (21) EP11734277.4                                                                        | (22) 08.02.2017                                                                                                                                                                 |
| C04B 26/06                                                                              | (47) 14.07.2021                                                                          | (54) PLASTER COMPOSITION                                                                                                                                                        |
| C04B 26/16                                                                              | (87) BR2011000027                                                                        | (73) Etex Building Performance International SAS                                                                                                                                |
| C09J 131/04                                                                             | 28.07.2011                                                                               | (72) MARTIN, Daniel                                                                                                                                                             |
| (11) EP3347324                                                                          | (22) 25.01.2011                                                                          | (31) 16290029                                                                                                                                                                   |
| (21) EP16764019.2                                                                       | (54) DENTAL COMPOSITION COMPRISING A CALCIUM SOURCE                                      | (32) 08.02.2016                                                                                                                                                                 |
| (47) 14.07.2021                                                                         | (73) Angelus Industria De Produtos Odontologicos S/A                                     | (33) European Patent Office (EPO)                                                                                                                                               |
| (87) US2016049177                                                                       | (72) OGLIARI, Fabrício Aulo                                                              | (51) C04B 28/26                                                                                                                                                                 |
| 16.03.2017                                                                              | PIVA, Evandro                                                                            | (11) EP3458427                                                                                                                                                                  |
| (22) 29.08.2016                                                                         | SANTOS, Valdemir dos                                                                     | (21) EP17725441.4                                                                                                                                                               |
| (54) ENHANCED ADHESIVE COMPOSITION FOR RE-ENFORCING JOINTS IN GYPSUM PANEL CONSTRUCTION | ALCÂNTARA, Roberto Queiróz Martins                                                       | (47) 14.07.2021                                                                                                                                                                 |
| (73) United States Gypsum Company                                                       | BELLINATI, César Eduardo                                                                 | (87) US2017032209                                                                                                                                                               |
| (72) MOYER JR., Kevin W.                                                                | (31) P11001878                                                                           | 23.11.2017                                                                                                                                                                      |
| HARGROVE, Pamela L.                                                                     | (32) 25.01.2010                                                                          | (22) 11.05.2017                                                                                                                                                                 |
| BURY, Rafael                                                                            | (33) Brazil                                                                              | (54) GRANULES                                                                                                                                                                   |
| (31) 201562215485 P                                                                     | (51) C04B 28/06                                                                          | (73) 3M Innovative Properties Company                                                                                                                                           |
| 201615214617                                                                            | C04B 38/02                                                                               | (72) SKORINA, Taisiya                                                                                                                                                           |
| (32) 08.09.2015                                                                         | (11) EP3592715                                                                           | ROSENFLANZ, Anatoly Z.                                                                                                                                                          |
| 20.07.2016                                                                              | (21) EP18707385.3                                                                        | TANGEMAN, Jean A.                                                                                                                                                               |
| (33) United States of America                                                           | (47) 14.07.2021                                                                          |                                                                                                                                                                                 |
| United States of America                                                                | (87) EP2018055292                                                                        |                                                                                                                                                                                 |

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| BUDD, Kenton D.                                                                       | (11) EP3036206                                                                   | (73) Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek TNO                                                                   |
| (31) 201662336988 P                                                                   | (21) EP14837266.7                                                                | (72) STRAATHOF, Michiel Hannes                                                                                                                     |
| 201662336995 P                                                                        | (47) 07.07.2021                                                                  | VAN DRIEL, Christoffel Adrianus                                                                                                                    |
| (32) 16.05.2016                                                                       | (87) US2014052570                                                                | (31) 16161643                                                                                                                                      |
| 16.05.2016                                                                            | 26.02.2015                                                                       | (32) 22.03.2016                                                                                                                                    |
| (33) United States of America                                                         | (22) 25.08.2014                                                                  | (33) European Patent Office (EPO)                                                                                                                  |
| United States of America                                                              | (54) UREA AND NITROGEN STABILIZER COMPOSITIONS                                   | (51) C07B 59/00                                                                                                                                    |
| (51) C04B 35/185                                                                      | (73) Koch Agronomic Services, LLC                                                | C07C 59/115                                                                                                                                        |
| C04B 35/195                                                                           | (72) GABRIELSON, Kurt David                                                      | (11) EP3510007                                                                                                                                     |
| C04B 38/00                                                                            | SUTTON, Allen                                                                    | (21) EP17768409.9                                                                                                                                  |
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| F27D 3/12                                                                             | (32) 23.08.2013                                                                  | (87) EP2017072582                                                                                                                                  |
| F27D 5/00                                                                             | (33) United States of America                                                    | 15.03.2018                                                                                                                                         |
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| (21) EP13720391.5                                                                     | C08G 18/16                                                                       | (54) [18F]-LABELLED LACTATE DERIVATIVE AS PET RADIOTRACER                                                                                          |
| (47) 07.07.2021                                                                       | C08G 18/18                                                                       | (73) GRANDIS                                                                                                                                       |
| (87) EP2013059219                                                                     | C08G 18/48                                                                       | (72) SONVEAUX, Pierre                                                                                                                              |
| 14.11.2013                                                                            | C08G 18/76                                                                       | LABAR, Daniel                                                                                                                                      |
| (22) 03.05.2013                                                                       | C09K 17/30                                                                       | VAN HÉE, Vincent                                                                                                                                   |
| (54) CERAMIC COMPOSITIONS AND SUPPORTS FOR OBJECTS TO BE FIRED IN A KILN OR FURNACE   | A01G 24/48                                                                       | DEHON, Gwenaël                                                                                                                                     |
| (73) IMERTECH SAS                                                                     | C05G 3/80                                                                        | FRÉDÉRIC, Raphaël                                                                                                                                  |
| (72) WEBER, Monika, Josefa                                                            | (11) EP3013138                                                                   | (31) 16188093                                                                                                                                      |
| SONNTAG, Andreas                                                                      | (21) EP14726168.9                                                                | (32) 09.09.2016                                                                                                                                    |
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| (51) C04B 35/52                                                                       | (22) 26.05.2014                                                                  | C07F 19/00                                                                                                                                         |
| C04B 35/624                                                                           | (54) POLYURETHANE FOAM FOR USE AS SOIL IMPROVER                                  | H01L 51/00                                                                                                                                         |
| C04B 35/628                                                                           | (73) Huntsman International LLC                                                  | H01L 51/50                                                                                                                                         |
| C04B 35/83                                                                            | (72) VANDEVELDE, Annelies                                                        | (11) EP3505524                                                                                                                                     |
| F16D 69/02                                                                            | MOUREAU, Herman, Eugene, Germain                                                 | (21) EP18210341.6                                                                                                                                  |
| (11) EP3248957                                                                        | INVERNIZZI, Fabio                                                                | (47) 07.07.2021                                                                                                                                    |
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| (54) SYSTEMS AND METHODS FOR CARBON STRUCTURES INCORPORATING SILICON CARBIDE WHISKERS | (33) European Patent Office (EPO)                                                | (72) BROOKS, Jason                                                                                                                                 |
| (73) Goodrich Corporation                                                             | (51) C06B 23/04                                                                  | SZIGETHY, Geza                                                                                                                                     |
| (72) LE COSTAQUE, Jean-Francois                                                       | C06D 5/06                                                                        | MORELLO, Glenn                                                                                                                                     |
| PEREA, Paul                                                                           | (11) EP2673243                                                                   | DENG, Jun                                                                                                                                          |
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| (32) 21.03.2016                                                                       | (47) 07.07.2021                                                                  | CHEN, Hsiao-Fan                                                                                                                                    |
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| (51) C04B 41/53                                                                       | 16.08.2012                                                                       | PCT/US2015/029269                                                                                                                                  |
| C04B 41/91                                                                            | (22) 07.02.2012                                                                  | (32) 05.11.2015                                                                                                                                    |
| C23C 8/04                                                                             | (54) CHEMICAL CARBON DIOXIDE GAS GENERATOR                                       | 05.05.2015                                                                                                                                         |
| C23C 8/26                                                                             | (73) Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek TNO | (33) United States of America                                                                                                                      |
| C23C 8/80                                                                             | (72) VAN VLIET, Laurens Daniël                                                   | World Intellectual Property Office (WIPO)                                                                                                          |
| H01F 1/147                                                                            | VAN PUL-VERBOOM, Viola                                                           | (51) C07C 1/00                                                                                                                                     |
| (11) EP3553202                                                                        | SCHUURBIERS, Cornelis Anthonius                                                  | C07C 2/12                                                                                                                                          |
| (21) EP19166413.5                                                                     | Hubertus                                                                         | C10G 11/04                                                                                                                                         |
| (47) 14.07.2021                                                                       | (31) 11153474                                                                    | C10G 11/05                                                                                                                                         |
| (22) 29.03.2019                                                                       | (32) 07.02.2011                                                                  | (11) EP2636661                                                                                                                                     |
| (54) METHODS OF REMOVING A CERAMIC COATING FROM A SUBSTRATE                           | (33) European Patent Office (EPO)                                                | (21) EP13290006.9                                                                                                                                  |
| (73) General Electric Company                                                         | (51) C06B 45/00                                                                  | (47) 14.07.2021                                                                                                                                    |
| (72) KOOL, Lawrence                                                                   | C06B 45/12                                                                       | (22) 14.01.2013                                                                                                                                    |
| (31) 201815950510                                                                     | F42B 5/16                                                                        | (54) Method for converting a heavy load using a catalytic cracking unit and a step for selective hydrogenation of gasoline from catalytic cracking |
| (32) 11.04.2018                                                                       | (11) EP3433566                                                                   | (73) IFP Energies nouvelles                                                                                                                        |
| (33) United States of America                                                         | (21) EP17715828.4                                                                | (72) Feugnet, Frederic                                                                                                                             |
| (51) C05B 7/00                                                                        | (47) 07.07.2021                                                                  | Hugues, François                                                                                                                                   |
| C05C 1/02                                                                             | (87) NL2017050175                                                                | Touchais, Natacha                                                                                                                                  |
| C05C 9/00                                                                             | 28.09.2017                                                                       | Dulot, Hugues                                                                                                                                      |
| C05G 3/90                                                                             | (22) 22.03.2017                                                                  | Pucci, Annick                                                                                                                                      |
|                                                                                       | (54) PROPELLANT CHARGE OR GRAIN                                                  |                                                                                                                                                    |

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| (51) C07C 1/207                        | (21) EP18701066.5                   | (21) EP18739880.5                     |
| C07C 9/15                              | (47) 14.07.2021                     | (47) 07.07.2021                       |
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| C07C 69/24                             | (54) CONVERSION OF WASTE PLASTIC TO | (54) PROCESS OF PRODUCTION OF 3,7-    |
| C25B 3/25                              | PROPYLENE AND CUMENE                | DIMETHYL-9-(2,6,6-TRIMETHYL-1-        |
| (11) EP3668830                         | (73) SABIC Global Technologies B.V. | CYCLOHEXEN-1-YL)-NONA-2E,7E-          |
| (21) EP18766382.8                      | (72) RAMAMURTHY, Krishna Kumar      | DIEN-4-YNE-1,6-DIOL                   |
| (47) 14.07.2021                        | NARAYANASWAMY, Ravichander          | (73) DSM IP Assets B.V.               |
| (87) NL2018050545                      | GANAPATHY BHOTLA, Venkata           | (72) BONRATH, Werner                  |
| 21.02.2019                             | Ramanarayanan                       | KUENZLI, Rolf                         |
| (22) 17.08.2018                        | STANISLAUS, Alexander               | (31) 17182235                         |
| (54) ELECTROCHEMICAL METHOD FOR        | GANJI, Santosh                      | (32) 20.07.2017                       |
| PRODUCING VALERIC ACID                 | (31) 201762442673 P                 | (33) European Patent Office (EPO)     |
| (73) Stichting Wageningen Research     | (32) 05.01.2017                     | (51) C07C 45/46                       |
| (72) BISSELINK, Roel Johannes Martinus | (33) United States of America       | C07C 45/79                            |
| CROCKATT, Marc                         | (51) C07C 17/263                    | C07C 45/85                            |
| GOETHEER, Earl Lawrence Vincent        | C07C 29/36                          | (11) EP3650435                        |
| (31) 17186650                          | C07C 67/08                          | (21) EP18306473.2                     |
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| European Patent Office (EPO)           | (22) 08.04.2019                     | LEWIS ACID COMPLEX IN A PROTIC        |
| (51) C07C 2/32                         | (54) 1-HALOALKADIENE AND PROCESS    | SOLVENT                               |
| C08F 2/34                              | FOR PREPARING THE SAME AND          | (73) Arkema France                    |
| C08F 4/69                              | A PROCESS FOR PREPARING             | (72) JOUANNEAU, Julien                |
| C08F 10/00                             | (9E,11Z)-9,11-HEXADECADIENYL        | LE, Guillaume                         |
| (11) EP3296329                         | ACETATE                             | SCHON, Steven                         |
| (21) EP16846757.9                      | (73) Shin-Etsu Chemical Co., Ltd.   | RICHARDSON, John                      |
| (47) 14.07.2021                        | (72) WATANABE, Tomohiro             | (51) C07C 51/12                       |
| (87) KR2016008980                      | MIYAKE, Yuki                        | C07C 51/44                            |
| 23.03.2017                             | KINSHO, Takeshi                     | C07C 53/08                            |
| (22) 16.08.2016                        | (31) 2018079776                     | (11) EP3599231                        |
| (54) METHOD FOR OLIGOMERIZATION OF     | (32) 18.04.2018                     | (21) EP18855140.2                     |
| OLEFINS                                | (33) Japan                          | (47) 14.07.2021                       |
| (73) LG Chem, Ltd.                     | (51) C07C 29/80                     | (87) JP2018020602                     |
| (72) IM, Seul Ki                       | C07C 31/12                          | 05.12.2019                            |
| LEE, Yong Ho                           | C07C 31/125                         | (22) 29.05.2018                       |
| SHIN, Eun Ji                           | C07C 67/03                          | (54) ACETIC ACID PRODUCTION METHOD    |
| LEE, Ki Soo                            | C07C 67/08                          | (73) Daicel Corporation               |
| PARK, Jin Young                        | C07C 69/82                          | (72) SHIMIYU, Masahiko                |
| SA, Seok Pil                           | (11) EP3511314                      | (51) C07C 53/10                       |
| HONG, Yoon Ki                          | (21) EP18854904.2                   | C07C 59/08                            |
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| (51) C07C 4/04                         | (22) 05.09.2018                     | (21) EP18808829.8                     |
| C07C 5/327                             | (54) SYSTEM FOR PRODUCING ESTER     | (47) 07.07.2021                       |
| C07C 7/00                              | COMPOSITION, AND METHOD FOR         | (87) US2018035237                     |
| C07C 7/04                              | PRODUCING ESTER COMPOSITION,        | 06.12.2018                            |
| C07C 11/04                             | USING SAME                          | (22) 31.05.2018                       |
| (11) EP3640231                         | (73) LG Chem, Ltd.                  | (54) CALCIUM L-LACTATE FRAMEWORKS     |
| (21) EP18201329.2                      | (72) LEE, Ha Na                     | AS NATURALLY DEGRADABLE               |
| (47) 14.07.2021                        | LEE, Sung Kyu                       | CARRIERS                              |
| (22) 18.10.2018                        | SHIN, Joon Ho                       | (73) The Regents of the University of |
| (54) METHOD FOR RECOVERING             | JUN, Hyoung                         | California                            |
| ETHYLENE                               | KIM, Hyun Kyu                       | (72) YAGHI, Omar M.                   |
| (73) Linde GmbH                        | (31) 20170114624                    | YANG, JingJing                        |
| (72) HÖFEL, Torben                     | (32) 07.09.2017                     | (31) 201762513973 P                   |
| (51) C07C 11/06                        | (33) Korea (Republic)               | (32) 01.06.2017                       |
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| C10G 1/10                              | C07C 43/303                         | (51) C07C 69/92                       |
| C10G 45/00                             | C07C 403/08                         | C07C 69/94                            |

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| 10.03.2016                             | ADHESION TO POLAR SUBSTRATES       | (22) 07.08.2017                      |
| (22) 04.09.2015                        | (73) Sika Technology AG            | (54) METHOD FOR PRODUCING            |
| (54) POLYMERIZABLE COMPOUND,           | (72) JANKE, Doreen                 | POLYTHIOL COMPOUND, METHOD           |
| POLYMER, POLYMERIZABLE                 | PASCHKOWSKI, Kai                   | FOR PRODUCING CURABLE                |
| COMPOSITION, AND FILM                  | BIEN, Kathrin                      | COMPOSITION, AND METHOD FOR          |
| (73) FUJIFILM Corporation              | (31) 17190113                      | PRODUCING CURED PRODUCT              |
| (72) KATOH, Shunya                     | (32) 08.09.2017                    | (73) Hoya Lens Thailand Ltd.         |
| HAYASHI, Daisuke                       | (33) European Patent Office (EPO)  | (72) KAGEYAMA, Yukio                 |
| (31) 2014181137                        | (51) C07C 271/22                   | KOUSAKA, Masahisa                    |
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| (33) Japan                             | C07K 5/103                         | (31) 2016154957                      |
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| C07C 231/12                            | (21) EP16796004.6                  | (33) Japan                           |
| C07C 233/36                            | (47) 07.07.2021                    | (51) C07C 381/12                     |
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| C11D 1/90                              | 24.11.2016                         | C07D 333/76                          |
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| (21) EP14003393.7                      | PREPARATION OF CARFILZOMIB OR      | C08G 59/68                           |
| (47) 14.07.2021                        | PHARMACEUTICALLY ACCEPTABLE        | C08K 5/36                            |
| (22) 01.10.2014                        | SALTS THEREOF                      | C09K 3/00                            |
| (54) PROCESS FOR PREPARING A           | (73) Laurus Labs Limited           | G03F 7/004                           |
| CONCENTRATED, NON-GELLING,             | (72) DEHURY, Sanjay Kumar          | (11) EP3498691                       |
| AQUEOUS SOLUTION OF BETAINES           | MEKALA, Nagaraju                   | (21) EP17838591.0                    |
| (73) Hayat Kimya Sanayi Anonim Sirketi | SHAIK, Jahangeer Baba              | (47) 07.07.2021                      |
| (72) Acikalın, Korkut                  | BUDDEPU, Srinivasa Rao             | (87) CN2017095371                    |
| Isiklar, Ahmet Nezir                   | KOLA, Lakshmi Kanth                | 15.02.2018                           |
| Koc, Fikret                            | INDUKURI, Venkata Sunil Kumar      | (22) 01.08.2017                      |
| (51) C07C 263/16                       | GORANTLA, Seeta Rama Anjaneyulu    | (54) NOVEL CATIONIC PHOTOINITIATOR,  |
| C07C 265/14                            | CHAVA, Satyanarayana               | AND PREPARATION METHOD               |
| C08G 18/32                             | (31) 2543CH2015                    | THEREFOR AND APPLICATIONS            |
| C08G 18/75                             | 2592CH2015                         | THEREOF                              |
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| (11) EP3625280                         | (32) 21.05.2015                    | Materials Co., Ltd                   |
| (21) EP18720640.4                      | 25.05.2015                         | Changzhou Tronly Advanced Electronic |
| (47) 07.07.2021                        | 22.06.2015                         | Materials Co., Ltd.                  |
| (87) EP2018061644                      | (33) India                         | (72) QIAN, Xiaochun                  |
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| (22) 07.05.2018                        | India                              | (32) 08.08.2016                      |
| (54) POLYISOCYANATE (P) AND METHOD     | (51) C07C 303/16                   | (33) China                           |
| FOR THE PRODUCTION THEREOF             | (11) EP3386946                     | (51) C07C 403/24                     |
| (73) BASF SE                           | (21) EP16805069.8                  | (11) EP3544955                       |
| (72) LUCAS, Frederic                   | (47) 14.07.2021                    | (21) EP17801448.6                    |
| PANCHENKO, Alexander                   | (87) EP2016079201                  | (47) 14.07.2021                      |
| BREUER, Klaus                          | 08.06.2017                         | (87) EP2017079771                    |
| HETTICHE, Frank                        | (22) 30.11.2016                    | 31.05.2018                           |
| THAM, Chee Kean                        | (54) PROCESS FOR PREPARING AN      | (22) 20.11.2017                      |
| (31) 17171588                          | ALKANESULPHONIC ACID               | (54) IMPROVED PROCESS FOR            |
| (32) 17.05.2017                        | (73) Evonik Operations GmbH        | PREPARING ASTACENE                   |
| (33) European Patent Office (EPO)      | (72) FONFÉ, Benjamin               | (73) BASF SE                         |
| (51) C07C 269/02                       | DÜRR, Nadine                       | (72) SCHAEFER, Bernd                 |
| C08G 18/12                             | JAKOB, Harald                      | SIEGEL, Wolfgang                     |
| C08G 18/30                             | CHEUNG, Chiu Kee                   | (31) 16200804                        |
| C08G 18/40                             | DÖRFLEIN, Andreas                  | (32) 25.11.2016                      |
| C08G 18/71                             | FUSS, Sebastian                    | (33) European Patent Office (EPO)    |
| C08G 18/76                             | (31) 15197066                      | (51) C07D 211/58                     |
| C08G 18/80                             | (32) 30.11.2015                    | (11) EP3325444                       |
| C08K 5/548                             | (33) European Patent Office (EPO)  | (21) EP16745321.6                    |
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| (22) 19.07.2016                     | (54) PROCESS FOR MANUFACTURING                 | (21) EP18721377.2                 |
| (54) METHODS FOR PREPARING          | A CYCLIC UREA ADDUCT OF AN                     | (47) 07.07.2021                   |
| N-(4-FLUOROBENZYL)-N-(1-            | ETHYLENEAMINE COMPOUND                         | (87) EP2018061094                 |
| METHYLPIPERIDIN-4-YL)-N'-(4-(2-     | (73) Nouryon Chemicals International B.V.      | 08.11.2018                        |
| METHYLPROPYLOXY)PHENYLMETHYL)-      | CARBAMIDE                                      | (22) 02.05.2018                   |
| AND ITS TARTRATE SALT AND           | KANTZER, Eike Nicolas                          | (54) PROCESS FOR PREPARING        |
| POLYMORPHIC FORM C                  | EDVINSSON, Rolf Krister                        | CHIRAL 2,3-DIHYDROTHIAZOLO[3,2-   |
| (73) Acadia Pharmaceuticals Inc.    | EHLERS, Ina                                    | A]PYRIMIDIN-4-IUM COMPOUNDS       |
| (72) CARLOS, Marlon                 | VAN DAM, Hendrik                               | (73) BASF SE                      |
| TANDEL, Sagun                       | ADRIAN MEREDITH, Jenny Valborg                 | (72) SHINDE, Harish               |
| OLSSON, Roger                       | Therese                                        | KORADIN, Christopher              |
| HILLGREN, Mikael                    | HAGBERG, Lars Torbjörn                         | DICKHAUT, Joachim                 |
| FLEMING, Matthew, J.                | TEN KATE, Antoon Jacob Berend                  | GOETZ, Roland                     |
| BOUDIER, Andreas, Philipp           | VENEMAN, Rens                                  | KLAUBER, Eric George              |
| WEBER, Beat, T.                     | RAAIJMAKERS, Michiel Jozef Thomas              | NARAYANAN, Sukunath               |
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| (33) United States of America       | (32) 23.05.2017                                | (32) 03.05.2017                   |
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| (11) EP3555048                      | C07D 277/36                                    | C07D 301/30                       |
| (21) EP17826574.0                   | C07D 333/16                                    | C07D 301/32                       |
| (47) 07.07.2021                     | C07D 417/14                                    | C07D 301/36                       |
| (87) IB2017058081                   | H01L 51/00                                     | C07D 303/04                       |
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| (22) 18.12.2017                     | H01L 31/042                                    | (21) EP17775754.9                 |
| (54) NEW PICOLINIC ACID DERIVATIVES | C01B 32/156                                    | (47) 07.07.2021                   |
| AND THEIR USE AS INTERMEDIATES      | (11) EP2962992                                 | (87) KR2017003266                 |
| (73) Novartis AG                    | (21) EP14785190.1                              | 05.10.2017                        |
| (72) HEINZ, Thomas                  | (47) 07.07.2021                                | (22) 27.03.2017                   |
| MARTIN, Benjamin                    | (87) KR2014003339                              | (54) GLYCIDYL ESTER COMPOUND      |
| RAMPF, Florian Andreas              | 23.10.2014                                     | PREPARATION METHOD                |
| ZAUGG, Werner                       | (22) 17.04.2014                                | (73) Kolon Industries, Inc.       |
| (31) 201662436222 P                 | (54) FULLERENE DERIVATIVE, ORGANIC             | (72) SUNG, Jong Un                |
| (32) 19.12.2016                     | SOLAR CELL USING SAME, AND                     | SEONG, Sang Youb                  |
| (33) United States of America       | MANUFACTURING METHOD THEREOF                   | KIM, Yu Sung                      |
| (51) C07D 231/08                    | (73) LG Chem, Ltd.                             | PARK, Jun Hyo                     |
| C07D 487/04                         | (72) BAE, Jaesoon                              | (31) 20160039643                  |
| C07F 7/10                           | LEE, Jaechol                                   | (32) 31.03.2016                   |
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| (47) 14.07.2021                     | JANG, Songrim                                  | C12P 7/40                         |
| (87) CN2016113000                   | CHOI, Jeong Min                                | C12P 7/62                         |
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| (22) 29.12.2016                     | CHO, Keun                                      | (11) EP3585902                    |
| (54) SYNTHESIS PROCESS OF           | CHOI, Doo Whan                                 | (21) EP18706520.6                 |
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| (73) CHIA TAI TIANQING              | (32) 17.04.2013                                | (87) EP2018054502                 |
| PHARMACEUTICAL GROUP CO., LTD.      | (33) Korea (Republic)                          | 30.08.2018                        |
| (72) ZHANG, Xiquan                  | (51) C07D 249/06                               | (22) 23.02.2018                   |
| ZHANG, Aiming                       | (11) EP3619199                                 | (54) METHOD FOR THE PREPARATION   |
| ZHOU, Zhou                          | (21) EP18722948.9                              | OF (3E,7E)-HOMOFARNESIC ACID OR   |
| YANG, Leilei                        | (47) 07.07.2021                                | (3E,7E)-HOMOFARNESIC ACID ESTER   |
| YAO, Huadong                        | (87) EP2018061172                              | (73) BASF SE                      |
| ZHU, Xueyan                         | 08.11.2018                                     | (72) SIEGEL, Wolfgang             |
| WANG, Hubo                          | (22) 02.05.2018                                | WEINGARTEN, Melanie               |
| (31) 201511028724                   | (54) PREPARATION OF 2-([1,2,3]TRIAZOL-2-       | BREUER, Michael                   |
| (32) 31.12.2015                     | YL)-BENZOIC ACID DERIVATIVES                   | SCHELWIES, Mathias                |
| (33) China                          | (73) Idorsia Pharmaceuticals Ltd               | (31) 17157974                     |
| (51) C07D 233/32                    | (72) DÖRRWÄCHTER, Patric                       | (32) 24.02.2017                   |
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(72) CORMA CANÓS, Avelino  
LEYVA-PÉREZ, Antonio  
ESPINÓS FERRI, Estela  
LÓPEZ CRUZ, Carlos
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(54) BIS-DIOX(OL)ANE COMPOUNDS  
(73) Coöperatie Koninklijke Cosun U.A.  
(72) LAZEROMS, Robert  
RAAIJMAKERS, Harry  
KONING, Cornelis Erne  
PAPEGAALJ, Alwin  
URMANOVA, Antonia  
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COMPOUNDS AND POLYMERS  
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(73) SWIMC LLC  
(72) GIBANEL, Sebastien  
PROUVOST, Benot  
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HYDROCHLORIDE  
(73) Celgene Corporation  
(72) COHEN, Benjamin M.  
TRAVERSE, John Fitzgerald  
XU, Jean  
LI, Ying  
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CYCLIC LACTAMS  
(73) Merck Patent GmbH  
(72) STOESEL, Philipp  
PARHAM, Amir Hossain  
PFLUMM, Christof  
JATSCH, Anja  
EBERLE, Thomas  
KROEBER, Jonas, Valentin  
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(54) PYRROLOQUINOLINE QUINONE B  
CRYSTAL FORM AND PREPARATION  
METHOD THEREFOR  
(73) Zhucheng Haotian Pharm Co., Ltd.  
(72) ZHU, Liping  
MEI, Xuefeng  
WANG, Jianrong  
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(33) China
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C09K 11/06  
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BENZIMIDAZOLO[1,2-A]BENZIMIDAZOLYL GROUPS,  
CARBAZOLYL GROUPS,  
BENZOFURANE GROUPS OR  
BENZOTHIOPHENE GROUPS FOR  
ORGANIC LIGHT EMITTING DIODES  
(73) Idemitsu Kosan Co., Ltd.  
(72) SCHÄFER, Thomas  
KAWAMURA, Masahiro  
NAGASHIMA, Hideaki
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G01N 21/64  
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(54) CONFORMATIONAL RESTRICTION OF  
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RED AND NEAR-IR RANGE
- (73) The U.S.A. as represented by the  
Secretary, Department of Health and  
Human Services  
(72) SCHNERMANN, Martin, J.  
MICHIE, Megan, S.  
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(21) EP15723843.7  
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(54) COMPOSITION FOR PREPARING AN  
AMORPHOUS POLYMERIC FOAM  
USING A BENZYLIDENE SORBITOL  
NUCLEATING AGENT  
(73) Clariant Plastics & Coatings Ltd  
(72) SCHOLZ, Patricia  
WEGNER, Jan-Erik  
NEUBER, Frank William  
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OF AN INHIBITOR OF  
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(73) Dipharm Francis S.r.l.  
(72) SANTILLO, Niccolò  
ATTOLINO, Emanuele  
BRENNI, Davide  
VLADISKOVIĆ, Chiara  
LOMBARDO, Alessandro  
RAZZETTI, Gabriele  
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Italy
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(54) PREPARATION OF  
ISOCYANATOSILANES  
(73) Momentive Performance Materials Inc.  
(72) O'KEEFE, Brendan  
WAGNER, Roland  
GLATZER, Holger  
SIMANDAN, Tiberiu  
KRAUSHAAR, Konstantin  
BIELE, Joe  
KROKE, Edwin

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| (32) 31.05.2017                    | (54) ORGANOMETALLIC COMPOUND,      | C12N 5/074                              |
| (33) United States of America      | ORGANIC LIGHT-EMITTING DEVICE      | (11) EP3483277                          |
| (51) C07F 7/18                     | INCLUDING THE ORGANOMETALLIC       | (21) EP18212761.3                       |
| (11) EP3575307                     | COMPOUND, AND DIAGNOSTIC           | (47) 07.07.2021                         |
| (21) EP19176902.5                  | COMPOSITION INCLUDING THE          | (22) 25.07.2014                         |
| (47) 07.07.2021                    | ORGANOMETALLIC COMPOUND            | (54) GENOME ENGINEERING                 |
| (22) 28.05.2019                    | (73) Samsung Electronics Co., Ltd. | (73) President and Fellows of Harvard   |
| (54) CARBONATE-CONTAINING SILANE   | (72) HWANG, Kyuyoung               | College                                 |
| COMPOUND AND MAKING METHOD         | KWAK, Seungyeon                    | (72) CHURCH, George                     |
| (73) Shin-Etsu Chemical Co., Ltd.  | KWAK, Yoonhyun                     | YANG, Luhan                             |
| (72) AOKI, Shotaro                 | LEE, Kum Hee                       | CARGOL, Marc Guell                      |
| TONOMURA, Yoichi                   | LEE, Sunghun                       | YANG, Joyce Lichi                       |
| KUBOTA, Yasufumi                   | CHOI, Whail                        | (31) 201361858866 P                     |
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| (54) NOVEL TRITYL PROTECTING AGENT | (22) 13.09.2017                    | (22) 18.12.2014                         |
| (73) Sekisui Medical Co., Ltd.     | (54) ORGANIC ELECTROLUMINESCENT    | (54) CRP CAPTURE/DETECTION OF GRAM      |
| (72) YANO, Shinya                  | MATERIALS AND DEVICES              | POSITIVE BACTERIA                       |
| KUBOTA, Hideki                     | (73) Universal Display Corporation | (73) President and Fellows of Harvard   |
| (31) 2016220173                    | (72) ZENG, Lichang                 | College                                 |
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| (32) 11.11.2016                    | BARRON, Edward                     | INGBER, Donald                          |
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| Japan                              | (32) 14.09.2016                    | ROTTMAN, Martin                         |
| (51) C07F 15/00                    | 23.08.2017                         | MURRAY, Evangelina                      |
| C09B 57/00                         | (33) United States of America      | DUSEL, Brendon                          |
| C09B 57/10                         | United States of America           | (31) 201361917705 P                     |
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| MATERIALS AND DEVICES              | (22) 27.08.2015                    | (47) 14.07.2021                         |
| (73) Universal Display Corporation | (54) STEVIA EXTRACTS ENRICHED      | (22) 10.10.2006                         |
| (72) CHEN, Hsiao-Fan               | IN REBAUDIOSIDE D, E, N AND/       | (54) Sequences for detection and        |
| BEERS, Scott                       | OR O AND PROCESS FOR THE           | identification of methicillin-resistant |
| SZIGETHY, Geza                     | PREPARATION THEREOF.               | Staphylococcus aureus (MRSA) of MREJ    |
| BROOKS, Jason                      | (73) PureCircle USA Inc.           | type xiv                                |
| (31) 201461979103 P                | (72) MARKOSYAN, Avetik             | (73) Becton Dickinson Infusion Therapy  |
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| United States of America           | 08.10.2014                         | (51) C07H 21/04                         |
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| (54) Sequences for detection and identification of methicillin-resistant Staphylococcus aureus (MRSA) of MREJ type xx | (73) The Research Foundation for The State University of New York         | (54) THERAPEUTIC AGENTS                                                           |
| (73) Becton Dickinson Infusion Therapy Systems Inc.                                                                   | (72) PARK, Sheldon                                                        | (73) King's College London                                                        |
| (72) Huletsky, Ann                                                                                                    | (31) 201662366241 P                                                       | (72) MAHER, John                                                                  |
| (32) 11.10.2005                                                                                                       | (32) 25.07.2016                                                           | ACHKOVA, Daniela Yordanova                                                        |
| (33) United States of America                                                                                         | (33) United States of America                                             | WHILDING, Lynsey May                                                              |
| (51) C07J 1/00                                                                                                        | (51) C07K 14/195                                                          | DRAPER, Benjamin Owen                                                             |
| C07J 5/00                                                                                                             | C07K 14/33                                                                | (31) 201513540                                                                    |
| C07J 7/00                                                                                                             | C12N 9/96                                                                 | (32) 31.07.2015                                                                   |
| C07J 51/00                                                                                                            | (11) EP3080144                                                            | (33) United Kingdom                                                               |
| G01N 33/48                                                                                                            | (21) EP14821808.4                                                         | (51) C07K 14/705                                                                  |
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| G01N 33/74                                                                                                            | (22) 08.12.2014                                                           | (11) EP3194443                                                                    |
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| (47) 07.07.2021                                                                                                       | (72) BETTSWORTH, Florence                                                 | (87) US2015050715                                                                 |
| (87) US2017030759                                                                                                     | MARTINEZ, Jérôme                                                          | 24.03.2016                                                                        |
| 09.11.2017                                                                                                            | (31) 1362354                                                              | (22) 17.09.2015                                                                   |
| (22) 03.05.2017                                                                                                       | (32) 10.12.2013                                                           | (54) TARGETING CYTOTOXIC CELLS WITH CHIMERIC RECEPTORS FOR ADOPTIVE IMMUNOTHERAPY |
| (54) QUANTITATIVE PROFILING OF PROGESTERONE METABOLITES FOR THE PREDICTION OF SPONTANEOUS PRETERM DELIVERY            | (33) France                                                               | (73) Novartis AG                                                                  |
| (73) Indiana University Research & Technology Corporation                                                             | (51) C07K 14/39                                                           | The Trustees of The University of Pennsylvania                                    |
| (72) PATIL, Avinash Shivaputrappa                                                                                     | C07K 16/00                                                                | (72) ENGELS, Boris                                                                |
| (31) 201662332174 P                                                                                                   | C07K 16/14                                                                | IDAMAKANTI, Neeraja                                                               |
| (32) 05.05.2016                                                                                                       | C07K 16/46                                                                | JUNE, Carl H.                                                                     |
| (33) United States of America                                                                                         | (11) EP3149032                                                            | LOEW, Andreas                                                                     |
| (51) C07K 4/12                                                                                                        | (21) EP15726923.4                                                         | MILONE, Michael C.                                                                |
| C07K 7/06                                                                                                             | (47) 07.07.2021                                                           | SONG, Huijuan                                                                     |
| C07K 14/47                                                                                                            | (87) EP2015061819                                                         | WANG, Enxiu                                                                       |
| (11) EP3380502                                                                                                        | 03.12.2015                                                                | WU, Qilong                                                                        |
| (21) EP16805193.6                                                                                                     | (22) 28.05.2015                                                           | BEATTY, Gregory                                                                   |
| (47) 07.07.2021                                                                                                       | (54) NEW BISPECIFIC FORMAT SUITABLE FOR USE IN HIGH-THROUGH-PUT SCREENING | (31) PCT/CN2014/086694                                                            |
| (87) GB2016053658                                                                                                     | (73) UCB Biopharma SRL                                                    | PCT/CN2014/090578                                                                 |
| 01.06.2017                                                                                                            | (72) FINNEY, Helene Margaret                                              | (32) 17.09.2014                                                                   |
| (22) 23.11.2016                                                                                                       | RAPECKI, Stephen Edward                                                   | 07.11.2014                                                                        |
| (54) PEPTIDES                                                                                                         | WRIGHT, Michael John                                                      | (33) World Intellectual Property Office (WIPO)                                    |
| (73) Immunocore Limited                                                                                               | (31) 201409558                                                            | World Intellectual Property Office (WIPO)                                         |
| Adaptimmune Limited                                                                                                   | (32) 29.05.2014                                                           | (51) C07K 14/705                                                                  |
| (72) POWLESLAND, Alex                                                                                                 | (33) United Kingdom                                                       | C12N 9/12                                                                         |
| CHESTER, Fiona                                                                                                        | (51) C07K 14/47                                                           | A61K 47/62                                                                        |
| (31) 201520544                                                                                                        | (11) EP3060577                                                            | C12Q 1/6869                                                                       |
| (32) 23.11.2015                                                                                                       | (21) EP14856188.9                                                         | (11) EP3268050                                                                    |
| (33) United Kingdom                                                                                                   | (47) 07.07.2021                                                           | (21) EP16762353.7                                                                 |
| (51) C07K 14/00                                                                                                       | (87) US2014061827                                                         | (47) 14.07.2021                                                                   |
| C07K 14/195                                                                                                           | 30.04.2015                                                                | (87) US2016021396                                                                 |
| C07K 14/36                                                                                                            | (22) 22.10.2014                                                           | 15.09.2016                                                                        |
| C12N 15/63                                                                                                            | (54) PRODUCTION OF RECOMBINANT LUBRICIN                                   | (22) 08.03.2016                                                                   |
| C12N 15/74                                                                                                            | (73) Lubris LLC                                                           | (54) PORE-FORMING PROTEIN CONJUGATE COMPOSITIONS AND METHODS                      |
| (11) EP3487870                                                                                                        | (72) SCHMIDT, Tannin                                                      | (73) The Trustees of Columbia University in the City of New York                  |
| (21) EP17835116.9                                                                                                     | JAY, Gregory D.                                                           | (72) LI, Zengmin                                                                  |
| (47) 14.07.2021                                                                                                       | (31) 201361894366 P                                                       | KALACHIKOV, Sergey                                                                |
| (87) US2017043724                                                                                                     | (32) 22.10.2013                                                           | JU, Jingyue                                                                       |
| 01.02.2018                                                                                                            | (33) United States of America                                             | FULLER, Carl W.                                                                   |
| (22) 25.07.2017                                                                                                       | (51) C07K 14/53                                                           | (31) 201562130326 P                                                               |
| (54) MONOMERIC STREPTAVIDIN MUTANTS, METHODS OF USING THE SAME AND PROCESSES OF MANUFACTURING PROTEINS                | C07K 14/54                                                                | (32) 09.03.2015                                                                   |
|                                                                                                                       | C07K 14/705                                                               | (33) United States of America                                                     |
|                                                                                                                       | (11) EP3328880                                                            | (51) C07K 14/725                                                                  |
|                                                                                                                       | (21) EP16750211.1                                                         | C12N 5/10                                                                         |
|                                                                                                                       | (47) 07.07.2021                                                           | C12N 15/85                                                                        |
|                                                                                                                       | (87) GB2016052324                                                         | (11) EP3548511                                                                    |
|                                                                                                                       | 09.02.2017                                                                | (21) EP17875651.6                                                                 |
|                                                                                                                       | (22) 28.07.2016                                                           | (47) 07.07.2021                                                                   |

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| (87) US2017063813<br>07.06.2018                                                              | (31) 201562160341 P<br>07.07.2016                                                                 |                                                                                                                                          |
| (22) 29.11.2017                                                                              | (32) 12.05.2015                                                                                   | (22) 29.12.2015                                                                                                                          |
| (54) METHODS AND MATERIALS FOR<br>CLONING FUNCTIONAL T CELL<br>RECEPTORS FROM SINGLE T CELLS | (33) United States of America                                                                     | (54) GRAFT COPOLYMER                                                                                                                     |
| (73) University of Pittsburgh - Of the<br>Commonwealth System of Higher<br>Education         | (51) C07K 16/40                                                                                   | (73) Galderma S.A.                                                                                                                       |
| (72) SHLOMCHIK, Mark                                                                         | G01N 33/573                                                                                       | (72) BERGMAN, Kristoffer                                                                                                                 |
| PANOUSIS, Constantinos George                                                                | G01N 33/68                                                                                        | (31) 14200376                                                                                                                            |
| ROWE, Alexander McIntyre                                                                     | (11) EP3289361                                                                                    | (32) 29.12.2014                                                                                                                          |
| TURQUETI NEVES, Adriana                                                                      | (21) EP16789890.7                                                                                 | (33) European Patent Office (EPO)                                                                                                        |
| SCHITTLER NEVES, Eduardo                                                                     | (47) 07.07.2021                                                                                   |                                                                                                                                          |
| (31) 201662427335 P                                                                          | (87) US2016030413                                                                                 | (51) C08F 2/00                                                                                                                           |
| (32) 29.11.2016                                                                              | 10.11.2016                                                                                        | C08F 2/18                                                                                                                                |
| (33) United States of America                                                                | (22) 02.05.2016                                                                                   | C08F 2/20                                                                                                                                |
| (51) C07K 16/00                                                                              | (54) KITS AND METHODS FOR<br>CAPTURING EXOSOMES                                                   | C08F 220/18                                                                                                                              |
| G01N 33/68                                                                                   | (73) Morehouse School of Medicine                                                                 | C11D 3/37                                                                                                                                |
| (11) EP3177932                                                                               | (72) NEWMAN, Gale, W.                                                                             | (11) EP3635017                                                                                                                           |
| (21) EP15757363.5                                                                            | ANYANWU, Samuel                                                                                   | (21) EP18730475.3                                                                                                                        |
| (47) 14.07.2021                                                                              | (31) 201514702372                                                                                 | (47) 07.07.2021                                                                                                                          |
| (87) US2015043497                                                                            | (32) 01.05.2015                                                                                   | (87) US2018031128                                                                                                                        |
| 11.02.2016                                                                                   | (33) United States of America                                                                     | 08.11.2018                                                                                                                               |
| (22) 03.08.2015                                                                              | (51) C08B 30/04                                                                                   | (22) 04.05.2018                                                                                                                          |
| (54) BIOMARKERS OF POLYCYSTIC<br>KIDNEY DISEASE AND USES<br>THEREOF                          | (11) EP2925790                                                                                    | (54) DUAL ACTIVATED MICROGEL                                                                                                             |
| (73) Genzyme Corporation                                                                     | (21) EP13858884.3                                                                                 | (73) Lubrizol Advanced Materials, Inc.                                                                                                   |
| (72) BESKROVNAYA, Oxana                                                                      | (47) 07.07.2021                                                                                   | (72) HSU, Shui-Jen Raymond                                                                                                               |
| BUKANOV, Nikolai                                                                             | (87) CN2013087866                                                                                 | LI, Dongcui                                                                                                                              |
| MORENO, Sarah                                                                                | 05.06.2014                                                                                        | LI, Sinan                                                                                                                                |
| (31) 201462033031 P                                                                          | (22) 26.11.2013                                                                                   | JACOBS, Robert                                                                                                                           |
| (32) 04.08.2014                                                                              | (54) MILLING PROCESS                                                                              | (31) 201762501183 P                                                                                                                      |
| (33) United States of America                                                                | (73) Novozymes A/S                                                                                | (32) 04.05.2017                                                                                                                          |
| (51) C07K 16/18                                                                              | (72) HAN, Wang                                                                                    | (33) United States of America                                                                                                            |
| (11) EP3071598                                                                               | LONG, Zhen                                                                                        | (51) C08F 2/18                                                                                                                           |
| (21) EP14803776.5                                                                            | MCLAUGHLIN, Scott R.                                                                              | C08F 12/08                                                                                                                               |
| (47) 07.07.2021                                                                              | XU, Wanghui                                                                                       | C08F 20/10                                                                                                                               |
| (87) US2014037563                                                                            | (31) PCT/CN2012/085364                                                                            | C08F 20/68                                                                                                                               |
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| (22) 09.05.2014                                                                              | (33) World Intellectual Property Office (WIPO)                                                    | (11) EP3538563                                                                                                                           |
| (54) SINGLE CHAIN INTRABODIES<br>THAT ALTER HUNTINGTIN MUTANT<br>DEGRADATION                 | (51) C08B 37/00                                                                                   | (21) EP17807972.9                                                                                                                        |
| (73) Vybion, Inc.                                                                            | (11) EP3466983                                                                                    | (47) 07.07.2021                                                                                                                          |
| (72) HENDERSON, Lee, Alan                                                                    | (21) EP18208846.8                                                                                 | (87) US2017060129                                                                                                                        |
| AMARO, Irene Alexandra                                                                       | (47) 14.07.2021                                                                                   | 17.05.2018                                                                                                                               |
| (31) 201361828625 P                                                                          | (22) 14.02.2018                                                                                   | (22) 06.11.2017                                                                                                                          |
| 201361871288 P                                                                               | (54) ACTIVATED PECTIN-CONTAINING<br>BIOMASS COMPOSITIONS,<br>PRODUCTS AND METHODS OF<br>PRODUCING | (54) CONTROLLED PARTICLE SIZE<br>DISTRIBUTION                                                                                            |
| (32) 29.05.2013                                                                              | (73) CP Kelco ApS                                                                                 | (73) DDP Specialty Electronic Materials US,<br>LLC                                                                                       |
| 28.08.2013                                                                                   | (72) STAUNSTRUP, Jan Aae                                                                          | DDP Specialty Electronic Materials US 8,<br>LLC                                                                                          |
| (33) United States of America                                                                | TRUDSO, Jens Eskil                                                                                | (72) FINCH, John David                                                                                                                   |
| United States of America                                                                     | HISCOCK, Donald F.                                                                                | JAGODZINSKI, James A.                                                                                                                    |
| (51) C07K 16/18                                                                              | KLIT, Carsten                                                                                     | (31) 201662419135 P                                                                                                                      |
| C07K 16/46                                                                                   | PEDERSEN, Tommy Ewi                                                                               | (32) 08.11.2016                                                                                                                          |
| G01N 27/447                                                                                  | (31) 201815892639                                                                                 | (33) United States of America                                                                                                            |
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| (21) EP16724805.3                                                                            | 201862617860 P                                                                                    | (51) C08F 2/20                                                                                                                           |
| (47) 14.07.2021                                                                              | (32) 09.02.2018                                                                                   | C08F 8/28                                                                                                                                |
| (87) US2016031899                                                                            | 15.02.2017                                                                                        | (11) EP3385287                                                                                                                           |
| 17.11.2016                                                                                   | 16.01.2018                                                                                        | (21) EP16870635.6                                                                                                                        |
| (22) 11.05.2016                                                                              | (33) United States of America                                                                     | (47) 07.07.2021                                                                                                                          |
| (54) MULTIMERIC PROTEIN PURITY<br>DETERMINATION                                              | United States of America                                                                          | (87) JP2016085281                                                                                                                        |
| (73) Regeneron Pharmaceuticals, Inc.                                                         | United States of America                                                                          | 08.06.2017                                                                                                                               |
| (72) MUTHUSAMY, Kathir                                                                       | (51) C08B 37/00                                                                                   | (22) 29.11.2016                                                                                                                          |
| LUO, Jiann-Kae                                                                               | C08B 37/02                                                                                        | (54) DISPERSION ASSIS5TANT FOR<br>SUSPENSION POLYMERIZATION,<br>METHOD FOR PRODUCING VINYL<br>POLYMER IN WHICH SAID ASSISTANT<br>IS USED |
|                                                                                              | C08B 37/08                                                                                        | (73) Japan Vam & Poval Co., Ltd.                                                                                                         |
|                                                                                              | C08G 81/00                                                                                        | (72) KOZUKA, Yoshiaki                                                                                                                    |
|                                                                                              | (11) EP3240806                                                                                    | OMORI, Takehiro                                                                                                                          |
|                                                                                              | (21) EP15817907.7                                                                                 | (31) 2015237965                                                                                                                          |
|                                                                                              | (47) 14.07.2021                                                                                   | (32) 04.12.2015                                                                                                                          |
|                                                                                              | (87) EP2015081353                                                                                 |                                                                                                                                          |

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|--------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------------------|
| (33) Japan                                                         | Infineum International Limited                         | (33) United States of America                                         |
| (51) C08F 2/38                                                     | (72) FAUST, Rudolf                                     | Sweden                                                                |
| C08F 293/00                                                        | EMERT, Jacob                                           | (51) C08F 8/42                                                        |
| C08L 53/00                                                         | DIMITROV, Philip                                       | C08G 18/22                                                            |
| (11) EP3592788                                                     | HOBIN, Peter                                           | C08G 18/48                                                            |
| (21) EP18711854.2                                                  | NESTI, Kyle                                            | C08G 18/73                                                            |
| (47) 07.07.2021                                                    | (31) 201815880145                                      | C08G 77/08                                                            |
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| 13.09.2018                                                         | (33) United States of America                          | C08G 77/18                                                            |
| (22) 06.03.2018                                                    | (51) C08F 4/64                                         | C08G 101/00                                                           |
| (54) FLUORINATED THERMOPLASTIC ELASTOMERS                          | C08F 4/80                                              | C08K 5/057                                                            |
| (73) Solvay Specialty Polymers Italy S.p.A.                        | C08F 110/02                                            | C08K 5/07                                                             |
| (72) CARELLA, Serena                                               | (11) EP3630851                                         | C08K 5/31                                                             |
| BRINATI, Giulio                                                    | (21) EP18724568.3                                      | C08K 5/59                                                             |
| DOSSI, Marco                                                       | (47) 07.07.2021                                        | C08L 43/04                                                            |
| (31) 17159768                                                      | (87) EP2018063077                                      | C08L 71/00                                                            |
| (32) 08.03.2017                                                    | 06.12.2018                                             | C08L 83/04                                                            |
| (33) European Patent Office (EPO)                                  | (22) 18.05.2018                                        | C08L 101/00                                                           |
| (51) C08F 2/44                                                     | (54) PREPARATION OF POLYMER DISPERSIONS                | C09J 175/04                                                           |
| C08F 2/48                                                          | (73) SABIC Global Technologies B.V.                    | (11) EP2837660                                                        |
| C08F 122/32                                                        | (72) FRIEDERICH, Nicolaas, Hendrika                    | (21) EP13775529.4                                                     |
| C08K 5/5419                                                        | ZUIDEVELD, Martin Alexander                            | (47) 14.07.2021                                                       |
| C09D 4/00                                                          | KENYON, Philip                                         | (87) JP2013002274                                                     |
| A61B 5/1172                                                        | MECKING, Stefan                                        | 17.10.2013                                                            |
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| (47) 14.07.2021                                                    | (33) European Patent Office (EPO)                      | (73) Mie University                                                   |
| (87) JP2016071699                                                  | (51) C08F 4/6592                                       | (72) NAKAMURA, Shuhei                                                 |
| 02.02.2017                                                         | C08F 210/06                                            | TANAKA, Yoshimi                                                       |
| (22) 25.07.2016                                                    | (11) EP3034523                                         | KANO, Mikihiro                                                        |
| (54) COMPOSITION FOR DETECTING LATENT FINGERPRINT                  | (21) EP14849045.1                                      | MIYATA, Kazuyo                                                        |
| (73) Toagosei Co., Ltd.                                            | (47) 07.07.2021                                        | MURAKAMI, Yasushi                                                     |
| (72) SHIMODA Osamu                                                 | (87) KR2014009202                                      | (31) 2012088447                                                       |
| TAKAGI, Yoshiyuki                                                  | 02.04.2015                                             | (32) 09.04.2012                                                       |
| MATSUMURA Motohiro                                                 | (22) 30.09.2014                                        | (33) Japan                                                            |
| ANDO Yushi                                                         | (54) METHOD FOR PREPARING PROPYLENE-1-BUTENE COPOLYMER | (51) C08F 10/06                                                       |
| (31) 2015150075                                                    | (73) LG Chem, Ltd.                                     | C08L 23/12                                                            |
| (32) 29.07.2015                                                    | (72) NOH, Kyung Seop                                   | C08L 23/16                                                            |
| (33) Japan                                                         | PARK, Churl Young                                      | (11) EP3159377                                                        |
| (51) C08F 2/46                                                     | KIM, Won Hee                                           | (21) EP15191181.5                                                     |
| C08F 4/32                                                          | JEON, Sang Jin                                         | (47) 14.07.2021                                                       |
| C09D 11/101                                                        | CHOI, Ra Yun                                           | (22) 23.10.2015                                                       |
| C09D 11/30                                                         | KIM, Byung Seok                                        | (54) HETEROPHASIC COMPOSITION                                         |
| (11) EP3464490                                                     | CHOI, Ji Ho                                            | (73) Borealis AG                                                      |
| (21) EP17724581.8                                                  | (31) 20130116655                                       | (72) GRESTENBERGER, Georg                                             |
| (47) 07.07.2021                                                    | (32) 30.09.2013                                        | KAHLEN, Susanne                                                       |
| (87) EP2017062458                                                  | (33) Korea (Republic)                                  | SANDHOLZER, Martina                                                   |
| 14.12.2017                                                         | (51) C08F 8/14                                         | POTTER, Gregory                                                       |
| (22) 23.05.2017                                                    | C08F 8/30                                              | (51) C08F 12/08                                                       |
| (54) PHOTOINITIATORS AND CURABLE COMPOSITIONS                      | C08F 216/06                                            | C08F 265/06                                                           |
| (73) AGFA NV                                                       | (11) EP3456749                                         | C08F 285/00                                                           |
| (72) LOCCUFIER, Johan                                              | (21) EP18202894.4                                      | C08K 5/57                                                             |
| (31) 16173227                                                      | (47) 14.07.2021                                        | C08L 27/06                                                            |
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| (33) European Patent Office (EPO)                                  | (54) A SUBSTITUTED POLYVINYL ALCOHOL REAGENT           | (11) EP3259291                                                        |
| (51) C08F 4/52                                                     | (73) PVAC Medical Technologies Ltd.                    | (21) EP15828592.4                                                     |
| C08F 110/10                                                        | (72) BERGMAN, Kristoffer                               | (47) 14.07.2021                                                       |
| (11) EP3517556                                                     | BOWDEN, Tim                                            | (87) US2015066230                                                     |
| (21) EP19153708.3                                                  | ENGSTRAND, Thomas                                      | 30.06.2016                                                            |
| (47) 14.07.2021                                                    | HILBORN, Jöns                                          | (22) 17.12.2015                                                       |
| (22) 25.01.2019                                                    | OSSIPOV, Dmitri                                        | (54) AN IMPACT MODIFIER AND A POLYMER COMPOSITION COMPRISING THE SAME |
| (54) METHOD FOR FORMING HIGHLY REACTIVE OLEFIN FUNCTIONAL POLYMERS | (31) 3266208 P                                         | (73) Rohm and Haas Company                                            |
| (73) University of Massachusetts                                   | 0800506                                                | (72) PETR, Michael, T.                                                |
|                                                                    | (32) 29.02.2008                                        | CRUZ, Carlos, A.                                                      |
|                                                                    | 03.03.2008                                             |                                                                       |

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| (33) United States of America             | C09D 133/00                            | (54) POLYORGANOSILOXANE-             |
| (51) C08F 20/34                           | (11) EP3607013                         | CONTAINING GRAFT COPOLYMER,          |
| C08F 265/00                               | (21) EP17903309.7                      | RESIN COMPOSITION, MOLDED            |
| C09D 133/14                               | (47) 14.07.2021                        | ARTICLE, SLIDING-PROPERTIES          |
| (11) EP3129411                            | (87) CN2017079238                      | IMPROVEMENT AGENT, AND SLIDING       |
| (21) EP15718714.7                         | 04.10.2018                             | MEMBER                               |
| (47) 07.07.2021                           | (22) 01.04.2017                        | (73) Mitsubishi Chemical Corporation |
| (87) US2015025268                         | (54) AQUEOUS POLYMER DISPERSION        | (72) OTONARI, Hiroaki                |
| 15.10.2015                                | AND AQUEOUS COATING                    | UEKI, Sohei                          |
| (22) 10.04.2015                           | COMPOSITION COMPRISING THE             | MATSUOKA, Shinji                     |
| (54) ADHESION PROMOTING AND/OR            | SAME                                   | (51) C08G 12/00                      |
| DUST SUPPRESSION COATING                  | (73) Dow Global Technologies LLC       | C08G 14/00                           |
| (73) 3M Innovative Properties Company     | Rohm and Haas Company                  | C08G 16/00                           |
| (72) ALI, Mahfuza B.                      | (72) YANG, Weijun                      | (11) EP2566903                       |
| CLEAR, Susannah C.                        | LI, Hu                                 | (21) EP11718392.1                    |
| HOBBS, Terry R.                           | JIANG, Siyuan                          | (47) 14.07.2021                      |
| JACOBS, Jeffry L.                         | WANG, Tao                              | (87) EP2011057364                    |
| LEE, Hae-Seung                            | MAURICE, Alvin Michael                 | 10.11.2011                           |
| MORRIS, Mary Lou                          | (51) C08F 220/18                       | (22) 07.05.2011                      |
| (31) 201461977970 P                       | C08F 230/02                            | (54) CARBOHYDRATE BINDERS AND        |
| (32) 10.04.2014                           | C09D 133/12                            | MATERIALS MADE THEREWITH             |
| (33) United States of America             | C09D 143/02                            | (73) Knauf Insulation                |
| (51) C08F 136/06                          | (11) EP3167021                         | (72) APPLEY, Charles                 |
| C08L 9/00                                 | (21) EP14897046.0                      | HAMPSON, Carl                        |
| (11) EP3658593                            | (47) 07.07.2021                        | MUELLER, Gert                        |
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| (47) 07.07.2021                           | 14.01.2016                             | (31) 332452 P                        |
| (87) IB2018055530                         | (22) 08.07.2014                        | (32) 07.05.2010                      |
| 31.01.2019                                | (54) STABLE COATING COMPOSITION        | (33) United States of America        |
| (22) 25.07.2018                           | (73) Dow Global Technologies LLC       | (51) C08G 12/00                      |
| (54) PROCESS FOR THE PREPARATION          | Rohm and Haas Company                  | C08G 14/00                           |
| OF 1,2 SYNDIOTACTIC                       | (72) WANG, Rui                         | C08G 16/00                           |
| POLYBUTADIENE IN THE PRESENCE             | LI, Ling                               | (11) EP2566904                       |
| OF A CATALYTIC SYSTEM                     | CHEN, Junyu                            | (21) EP11720076.6                    |
| COMPRISING A COBALT COMPLEX               | WANG, Tao                              | (47) 14.07.2021                      |
| WITH A PHOSPHINE LIGAND                   | (51) C08F 220/18                       | (87) EP2011057363                    |
| (73) Versalis S.p.A.                      | C09D 4/06                              | 10.11.2011                           |
| (72) SOMMAZZI, Anna                       | C09D 133/06                            | (22) 07.05.2011                      |
| RICCI, Giovanni                           | C09K 11/02                             | (54) CARBOHYDRATE POLYAMINE          |
| FISCALETTI, Giuliano                      | C09K 11/08                             | BINDERS AND MATERIALS MADE           |
| MASI, Francesco                           | (11) EP3443048                         | THEREWITH                            |
| LEONE, Giuseppe                           | (21) EP17719759.7                      | (73) Knauf Insulation                |
| (31) 201700085384                         | (47) 14.07.2021                        | (72) APPLEY, Charles                 |
| (32) 26.07.2017                           | (87) US2017025734                      | HAMPSON, Carl                        |
| (33) Italy                                | 19.10.2017                             | MUELLER, Gert                        |
| (51) C08F 214/22                          | (22) 03.04.2017                        | PACOREL, Bénédicte                   |
| C08F 214/26                               | (54) METHOD FOR PRODUCING              | (31) 332458 P                        |
| C08F 214/28                               | ENCAPSULATED QUANTUM DOTS              | (32) 07.05.2010                      |
| (11) EP3397664                            | (73) Dow Global Technologies, LLC      | (33) United States of America        |
| (21) EP16831674.3                         | Rohm and Haas Electronic Materials LLC | (51) C08G 12/00                      |
| (47) 14.07.2021                           | (72) JOO, Jake                         | C08G 14/00                           |
| (87) US2016067733                         | O'CONNELL, Kathleen M.                 | C08G 16/00                           |
| 06.07.2017                                | CHEN, Liang                            | C08L 61/00                           |
| (22) 20.12.2016                           | DERMODY, Daniel L.                     | (11) EP2707405                       |
| (54) COPOLYMERS OF                        | BAI, Zhifeng                           | (21) EP12718259.0                    |
| PERFLUOROTRIVINYLTIAZINE                  | TAYLOR, James C.                       | (47) 14.07.2021                      |
| COMPOUNDS AND METHODS FOR                 | (31) 201662321279 P                    | (87) EP2012058322                    |
| SYNTHESIZING THE COPOLYMERS               | (32) 12.04.2016                        | 15.11.2012                           |
| (73) E. I. du Pont de Nemours and Company | (33) United States of America          | (22) 06.05.2012                      |
| (72) HUNG, Ming-Hong                      | (51) C08F 283/12                       | (54) LIQUID HIGH SOLIDS BINDER       |
| TANG, Phan Linh                           | C08F 285/00                            | COMPOSITION                          |
| LYONS, Donald F.                          | C08K 5/00                              | (73) Knauf Insulation                |
| CHEN, Xudong                              | C08L 51/04                             | (72) MUELLER, Gert                   |
| (31) 201562272722 P                       | C08L 69/00                             | (31) PCT/EP2011/057363               |
| (32) 30.12.2015                           | (11) EP3375800                         | 201161556458 P                       |
| (33) United States of America             | (21) EP18170591.4                      | (32) 07.05.2011                      |

|                                                |                                   |                                                |
|------------------------------------------------|-----------------------------------|------------------------------------------------|
| 07.11.2011                                     | DOROODIAN, Amir                   | (73) Huntsman International LLC                |
| (33) World Intellectual Property Office (WIPO) | LUTTER, Heinz-Dieter              | (72) BINAGHI, Luca                             |
| United States of America                       | RICHTER, Sebastian                | DEDECKER, Kristof                              |
| (51) C08G 18/08                                | HADICK, Udo                       | (31) 17162743                                  |
| C08G 18/12                                     | (31) 17154041                     | (32) 24.03.2017                                |
| C08G 18/32                                     | (32) 31.01.2017                   | (33) European Patent Office (EPO)              |
| C08G 18/34                                     | (33) European Patent Office (EPO) | (51) C08G 59/24                                |
| C08G 18/42                                     | (51) C08G 18/24                   | C08G 59/40                                     |
| C08G 18/44                                     | C08G 18/28                        | C08G 59/50                                     |
| C08G 18/66                                     | C08G 18/48                        | C08K 9/06                                      |
| C08G 18/73                                     | C08G 18/75                        | (11) EP3274390                                 |
| C08G 18/76                                     | C08G 18/80                        | (21) EP16711547.6                              |
| C08G 101/00                                    | C08G 101/00                       | (47) 07.07.2021                                |
| D06N 3/14                                      | C09D 175/04                       | (87) EP2016055162                              |
| (11) EP3590986                                 | C09J 175/04                       | 29.09.2016                                     |
| (21) EP18760988.8                              | (11) EP3655452                    | (22) 10.03.2016                                |
| (47) 07.07.2021                                | (21) EP18705624.7                 | (54) A THERMOSETTING EPOXY                     |
| (87) JP2018005736                              | (47) 07.07.2021                   | RESIN COMPOSITION FOR THE                      |
| 07.09.2018                                     | (87) EP2018053738                 | PREPARATION OF OUTDOOR                         |
| (22) 19.02.2018                                | 24.01.2019                        | ARTICLES, AND THE ARTICLES                     |
| (54) POLYURETHANE RESIN FOR                    | (22) 15.02.2018                   | OBTAINED THEREFROM                             |
| SYNTHETIC LEATHER                              | (54) Silylated polyurethanes      | (73) Huntsman Advanced Materials Licensing     |
| (73) Sanyo Chemical Industries, Ltd.           | AND METHODS FOR PREPARING         | (Switzerland) GmbH                             |
| Mitsubishi Chemical Corporation                | THEREOF                           | (72) BEISELE, Christian                        |
| (72) ICHIHARA, Eiji                            | (73) Henkel AG & Co. KGaA         | LIU, Zhijian                                   |
| NEKOHASHI, Yuki                                | (72) DAMKE, Jan-Erik              | CHEN, Hongyan                                  |
| YOKOI, Tomomi                                  | KLEIN, Johann                     | HISHIKAWA, Satoru                              |
| (31) 2017036029                                | MEJIA, Esteban                    | (31) PCT/CN2015/075085                         |
| (32) 28.02.2017                                | BRISAR, Rok                       | (32) 26.03.2015                                |
| (33) Japan                                     | (31) 17182578                     | (33) World Intellectual Property Office (WIPO) |
| (51) C08G 18/10                                | (32) 21.07.2017                   | (51) C08G 59/24                                |
| C08G 18/18                                     | (33) European Patent Office (EPO) | C08K 5/357                                     |
| C08G 18/32                                     | (51) C08G 18/32                   | (11) EP3307805                                 |
| C08G 18/48                                     | C08G 18/78                        | (21) EP16728796.0                              |
| C08G 18/50                                     | C08G 18/79                        | (47) 07.07.2021                                |
| C08G 18/76                                     | C09D 175/04                       | (87) US2016034269                              |
| C08G 101/00                                    | (11) EP3197931                    | 15.12.2016                                     |
| (11) EP3240817                                 | (21) EP15780993.0                 | (22) 26.05.2016                                |
| (21) EP15875827.6                              | (47) 14.07.2021                   | (54) CURABLE COMPOSITIONS                      |
| (47) 07.07.2021                                | (87) US2015051905                 | CONTAINING BENZOXAZINE EPOXY                   |
| (87) US2015011163                              | 31.03.2016                        | BLEND AND USE THEREOF                          |
| 07.07.2016                                     | (22) 24.09.2015                   | (73) Cytec Industries Inc.                     |
| (22) 13.01.2015                                | (54) USE OF NON-FLUORINATED       | (72) DYERS, Leon                               |
| (54) REDUCTION OF ALDEHYDES IN                 | OR PARTIALLY FLUORINATED          | BONNEAU, Mark Richard                          |
| AMINE CATALYSTS                                | URETHANES IN COATINGS             | GRIFFIN, James Martin                          |
| (73) Huntsman Petrochemical LLC                | (73) The Chemours Company FC, LLC | (31) 201562174759 P                            |
| (72) RISTER, Ernest L. Jr.                     | (72) SWOREN, John Christopher     | (32) 12.06.2015                                |
| ZHAO, Haibo                                    | BROWN, Gerald Oronde              | (33) United States of America                  |
| GRIGSBY, Robert A. Jr.                         | HAIDZINSKAYA, Tatsiana            | (51) C08G 59/42                                |
| MOORE, Robert B.                               | KOHLER, Ewa                       | C08L 63/00                                     |
| (31) 201462098380 P                            | (31) 201462055965 P               | C09D 4/00                                      |
| (32) 31.12.2014                                | (32) 26.09.2014                   | C09D 163/00                                    |
| (33) United States of America                  | (33) United States of America     | (11) EP3512915                                 |
| (51) C08G 18/10                                | (51) C08G 18/48                   | (21) EP17762060.6                              |
| C08G 18/38                                     | C08G 18/54                        | (47) 14.07.2021                                |
| C08G 18/48                                     | C08G 18/76                        | (87) EP2017071202                              |
| C08G 18/71                                     | C08J 9/14                         | 22.03.2018                                     |
| (11) EP3577147                                 | C08K 5/521                        | (22) 23.08.2017                                |
| (21) EP18701345.3                              | (11) EP3601395                    | (54) LIGHT-FIXABLE CASTING                     |
| (47) 07.07.2021                                | (21) EP18710076.3                 | COMPOUND AND METHOD FOR                        |
| (87) EP2018051789                              | (47) 07.07.2021                   | SELECTIVE CASTING SUBSTRATES/                  |
| 09.08.2018                                     | (87) EP2018056732                 | COMPONENTS USING SAID                          |
| (22) 25.01.2018                                | 27.09.2018                        | COMPOUND                                       |
| (54) OXIDIC SILICON PARTICLE                   | (22) 16.03.2018                   | (73) Delo Industrieklebstoffe GmbH & Co.       |
| DISPERSION IN POLYOL                           | (54) PROCESS FOR MAKING RIGID     | KGaA                                           |
| (73) BASF SE                                   | POLYURETHANE OR URETHANE-         | (72) REICHVILSER, Moritz                       |
| (72) THIELBEER, Frank                          | MODIFIED POLYISOCYANURATE         | STÄRK, Angela                                  |
| KOENIG, Christian                              | FOAMS                             | KÖNIGER, Tobias                                |

|                                   |                                            |                                   |
|-----------------------------------|--------------------------------------------|-----------------------------------|
| KMETH, Ralf                       | (51) C08G 64/04                            | BRIFFAUD, Thierry                 |
| (31) 102016117183                 | C08G 64/18                                 | LOYEN, Karine                     |
| (32) 13.09.2016                   | C08G 64/22                                 | BERDIN, Laure                     |
| (33) Germany                      | C08G 77/398                                | (31) 1661012                      |
| (51) C08G 61/00                   | C08G 77/448                                | (32) 14.11.2016                   |
| C08G 73/00                        | C08L 69/00                                 | (33) France                       |
| H01L 51/46                        | (11) EP3406650                             | (51) C08G 69/50                   |
| (11) EP3665729                    | (21) EP17862544.8                          | G03F 7/00                         |
| (21) EP18750220.8                 | (47) 07.07.2021                            | G03F 7/004                        |
| (47) 07.07.2021                   | (87) KR2017011255                          | G03F 7/027                        |
| (87) EP2018071763                 | 26.04.2018                                 | G03F 7/037                        |
| 14.02.2019                        | (22) 12.10.2017                            | (11) EP3561595                    |
| (22) 10.08.2018                   | (54) COPOLYCARBONATE AND RESIN             | (21) EP17887486.3                 |
| (54) ORGANIC SEMICONDUCTING       | COMPOSITION COMPRISING SAME                | (47) 07.07.2021                   |
| POLYMER                           | (73) LG Chem, Ltd.                         | (87) JP2017045753                 |
| (73) Raynergy Tek Inc.            | (72) LEE, Ki Jae                           | 05.07.2018                        |
| (72) KOWALSKI, Sebastian          | PARK, Jung Jun                             | (22) 20.12.2017                   |
| BLOUIN, Nicolas                   | HONG, Moo Ho                               | (54) PHOTSENSITIVE RESIN          |
| PRON, Agnieszka                   | BAHN, Hyong Min                            | COMPOSITION FOR A                 |
| KROMPIEC, Michal                  | HWANG, Young Young                         | PHOTOSENSITIVE RESIN PRINTING     |
| (31) 17185962                     | (31) 20160136730                           | PLATE PRECURSOR                   |
| (32) 11.08.2017                   | (32) 20.10.2016                            | (73) Toray Industries, Inc.       |
| (33) European Patent Office (EPO) | (33) Korea (Republic)                      | (72) ABURA Tsutomu                |
| (51) C08G 63/44                   | (51) C08G 69/26                            | TACHI Norihito                    |
| C08G 73/00                        | C08K 7/02                                  | IDETA Kohei                       |
| H05K 1/03                         | C08K 7/06                                  | TAKAHASHI Ryosuke                 |
| (11) EP3066148                    | C08L 77/00                                 | (31) 2016250962                   |
| (21) EP14857025.2                 | D02G 3/04                                  | 2017056935                        |
| (47) 14.07.2021                   | D02G 3/40                                  | 2017120103                        |
| (87) US2014000199                 | D03D 1/00                                  | (32) 26.12.2016                   |
| 07.05.2015                        | D04B 21/00                                 | 23.03.2017                        |
| (22) 21.10.2014                   | D06M 13/224                                | 20.06.2017                        |
| (54) ULTRA LOW LOSS DIELECTRIC    | D06M 15/227                                | (33) Japan                        |
| THERMOSETTING RESIN               | D06M 15/53                                 | Japan                             |
| COMPOSITIONS AND HIGH             | D06M 101/36                                | Japan                             |
| PREFORMANCE LAMINATES             | D03D 15/00                                 | (51) C08G 73/10                   |
| MANUFACTURED THEREFROM            | (11) EP2963165                             | C08G 73/14                        |
| (73) Novoset, LLC                 | (21) EP14756663.2                          | C08L 63/00                        |
| (72) DAS, Sajal                   | (47) 07.07.2021                            | C08L 79/08                        |
| SHIPMAN, Patrick                  | (87) JP2014052866                          | (11) EP3023449                    |
| (31) 201313998482                 | 04.09.2014                                 | (21) EP14826521.8                 |
| (32) 04.11.2013                   | (22) 07.02.2014                            | (47) 14.07.2021                   |
| (33) United States of America     | (54) COMPOSITE FIBER, FABRIC, KNITTED      | (87) JP2014068774                 |
| (51) C08G 63/81                   | ARTICLE, AND COMPOSITE MATERIAL            | 22.01.2015                        |
| C08G 63/82                        | (73) Mitsubishi Gas Chemical Company, Inc. | (22) 15.07.2014                   |
| (11) EP2736943                    | (72) MATSUMOTO Nobuhiko                    | (54) POLYAMIDE-IMIDE RESIN, AND   |
| (21) EP12820399.9                 | MITADERA Jun                               | CURABLE RESIN COMPOSITION AND     |
| (47) 07.07.2021                   | (31) 2013040251                            | CURED PRODUCT OF SAME             |
| (87) JP2012069776                 | (32) 01.03.2013                            | (73) DIC Corporation              |
| 07.02.2013                        | (33) Japan                                 | (72) MURAKAMI, Kouichi            |
| (22) 27.07.2012                   | (51) C08G 69/40                            | MIYAGAKI, Atsushi                 |
| (54) METHOD FOR PRODUCING         | C08J 5/18                                  | (31) 2013149409                   |
| POLYMER, DEVICE FOR PRODUCING     | C08K 5/053                                 | (32) 18.07.2013                   |
| POLYMER, DEVICE FOR PRODUCING     | C08L 77/02                                 | (33) Japan                        |
| COMPLEX, AND POLYMER PRODUCT      | C08L 77/06                                 | (51) C08G 75/00                   |
| (73) Ricoh Company, Ltd.          | B29C 48/00                                 | C08G 75/08                        |
| (72) NEMOTO, Taichi               | (11) EP3538340                             | (11) EP2735581                    |
| TANAKA, Chiaki                    | (21) EP17804634.8                          | (21) EP12816968.7                 |
| YAMAUCHI, Yoshitaka               | (47) 07.07.2021                            | (47) 14.07.2021                   |
| (31) 2011166634                   | (87) FR2017053109                          | (87) JP2012068235                 |
| 2012029272                        | 17.05.2018                                 | 31.01.2013                        |
| 2012059755                        | (22) 14.11.2017                            | (22) 18.07.2012                   |
| (32) 29.07.2011                   | (54) POLYMER COMPOSITION THAT CAN          | (54) COMPOSITION AND POLYMER      |
| 14.02.2012                        | BE EXTRUDED INTO AN OBJECT                 | (73) Asahi Kasei Kabushiki Kaisha |
| 16.03.2012                        | THAT IS PERMEABLE TO WATER                 | (72) NAKAMURA Akitake             |
| (33) Japan                        | VAPOUR                                     | ENDO Takeshi                      |
| Japan                             | (73) Arkema France                         | (31) 2011161207                   |
| Japan                             | (72) PINEAU, Quentin                       | 2011184027                        |

|                                            |                                               |                                   |
|--------------------------------------------|-----------------------------------------------|-----------------------------------|
| 2011209486                                 | C08K 5/5397                                   | PRODUCT AND THE METHOD OF         |
| (32) 22.07.2011                            | C08L 85/02                                    | MAKING THE SAME                   |
| 25.08.2011                                 | C08L 101/00                                   | (73) FPinnovations                |
| 26.09.2011                                 | C09K 11/00                                    | (72) BEN, Yuxia                   |
| (33) Japan                                 | C09K 11/06                                    | DORRIS, Gilles                    |
| Japan                                      | (11) EP2706081                                | CAI, Xiaolin                      |
| Japan                                      | (21) EP12779312.3                             | HUA, Xujun                        |
| (51) C08G 75/14                            | (47) 07.07.2021                               | YUAN, Zhirun                      |
| C08J 5/00                                  | (87) JP2012061562                             | NEAULT, Patrick                   |
| C08L 81/02                                 | 08.11.2012                                    | (31) 201562155583 P               |
| C08G 75/02                                 | (22) 01.05.2012                               | (32) 01.05.2015                   |
| (11) EP2883900                             | (54) RARE-EARTH COMPLEX POLYMER               | (33) United States of America     |
| (21) EP13828420.3                          | AND PLASTIC MOLDED PRODUCT                    | (51) C08J 3/24                    |
| (47) 14.07.2021                            | (73) National University Corporation Hokkaido | C08J 5/18                         |
| (87) KR2013007081                          | University                                    | C08K 5/14                         |
| 13.02.2014                                 | (72) HASEGAWA, Yasuchika                      | C08L 7/00                         |
| (22) 06.08.2013                            | MIYATA, Kohei                                 | C08L 9/00                         |
| (54) POLYARYLENE SULFIDE RESIN AND         | FUSHIMI, Koji                                 | C08L 9/06                         |
| METHOD FOR PREPARING SAME                  | KATO, Masako                                  | C08L 23/16                        |
| (73) SK Chemicals Co., Ltd.                | KOBAYASHI, Atsushi                            | (11) EP3277732                    |
| (72) LEE, Se-Ho                            | (31) 2011103136                               | (21) EP16773972.1                 |
| KIM, Sung-Gi                               | (32) 02.05.2011                               | (47) 14.07.2021                   |
| (31) 20120086423                           | (33) Japan                                    | (87) US2016024656                 |
| (32) 07.08.2012                            | (51) C08J 3/00                                | 06.10.2016                        |
| (33) Korea (Republic)                      | C08J 3/12                                     | (22) 29.03.2016                   |
| (51) C08G 77/06                            | C08J 3/20                                     | (54) DIENE RUBBER COMPOSITION     |
| C08G 77/448                                | C08K 5/544                                    | CONFIGURED TO BE VULCANIZED       |
| (11) EP3555179                             | C08K 5/5455                                   | AT LOWER TEMPERATURE; AND         |
| (21) EP17829182.9                          | C08K 5/5465                                   | MANUFACTURING PROCESS OF          |
| (47) 07.07.2021                            | C08L 27/12                                    | RUBBER ARTICLE                    |
| (87) EP2017083465                          | C08L 27/18                                    | (73) CARIFLEX PTE. LTD.           |
| 28.06.2018                                 | C08L 81/02                                    | (72) NAITO, Fumio                 |
| (22) 19.12.2017                            | C08L 81/04                                    | NAKAZAWA, Yoshikatsu              |
| (54) PRODUCTION OF SILOXANE-               | (11) EP3409726                                | (31) 2015068140                   |
| CONTAINING BLOCK                           | (21) EP17744258.9                             | (32) 30.03.2015                   |
| COPOLYCARBONATES BY MEANS OF               | (47) 07.07.2021                               | (33) Japan                        |
| COMPATIBILIZERS                            | (87) JP2017002541                             | (51) C08J 5/04                    |
| (73) Covestro Intellectual Property GmbH & | 03.08.2017                                    | C08K 3/22                         |
| Co. KG                                     | (22) 25.01.2017                               | C08K 5/09                         |
| (72) MEYER, Alexander                      | (54) MOLDED PRODUCT FORMED FROM               | C08L 23/06                        |
| HORN, Klaus                                | A POLYPHENYLENE SULFIDE RESIN                 | C08L 67/04                        |
| HUGGINS, John                              | COMPOSITION AND METHOD FOR                    | D01F 8/06                         |
| (31) 16205062                              | PRODUCING SAME                                | D01F 8/14                         |
| (32) 19.12.2016                            | (73) Toray Industries, Inc.                   | (11) EP3280762                    |
| (33) European Patent Office (EPO)          | (72) ISAGO Hiroyuki                           | (21) EP16797080.5                 |
| (51) C08G 77/452                           | YOSHIDA Tomoya                                | (47) 14.07.2021                   |
| C08G 77/455                                | SAITOH Kei                                    | (87) US2016032667                 |
| C09D 183/10                                | (31) 2016012272                               | 24.11.2016                        |
| D06M 11/77                                 | 2016166791                                    | (22) 16.05.2016                   |
| (11) EP3724284                             | (32) 26.01.2016                               | (54) EXTRUDABLE POLYMER           |
| (21) EP17825441.3                          | 29.08.2016                                    | COMPOSITION AND METHOD            |
| (47) 14.07.2021                            | (33) Japan                                    | OF MAKING MOLDED ARTICLES         |
| (87) EP2017082682                          | Japan                                         | UTILIZING THE SAME                |
| 20.06.2019                                 | (51) C08J 3/05                                | (73) Earth Renewable Technologies |
| (22) 13.12.2017                            | C08J 3/20                                     | (72) WOLFE, Thomas Jason          |
| (54) SILICONE COPOLYMERS,                  | C08L 1/02                                     | MITCHELL, Melvin Glenn            |
| PRODUCTION THEREOF AND USE                 | D21C 5/02                                     | BRANDENBURG, James Etson          |
| THEREOF FOR TREATMENT OF                   | D21C 9/00                                     | (31) 201514972637                 |
| FIBROUS SUBSTRATES                         | D21H 27/00                                    | 201615152087                      |
| (73) Wacker Chemie AG                      | (11) EP3289004                                | (32) 17.12.2015                   |
| (72) LEHOTKAY, Thomas                      | (21) EP16788980.7                             | 11.05.2016                        |
| EICHBERGER, Walter                         | (47) 07.07.2021                               | (33) United States of America     |
| SCHAEFER, Oliver                           | (87) CA2016050475                             | United States of America          |
| SEEGER-FEICHTINGER, Inge                   | 10.11.2016                                    | (51) C08J 5/06                    |
| (51) C08G 79/04                            | (22) 25.04.2016                               | C09J 109/00                       |
| C08G 79/14                                 | (54) A DRY MIXED RE-DISPERSIBLE               | C09J 113/00                       |
| C08K 5/00                                  | CELLULOSE FILAMENT/CARRIER                    | F16G 1/10                         |
| C08K 5/07                                  |                                               | F16G 1/28                         |

|                                    |                                            |                                  |
|------------------------------------|--------------------------------------------|----------------------------------|
| F16G 5/08                          | (11) EP3460875                             | (11) EP3432316                   |
| (11) EP3374418                     | (21) EP17885964.1                          | (21) EP17766811.8                |
| (21) EP16809570.1                  | (47) 14.07.2021                            | (47) 07.07.2021                  |
| (47) 07.07.2021                    | (87) KR2017015248                          | (87) JP2017010767                |
| (87) US2016061384                  | 05.07.2018                                 | 21.09.2017                       |
| 18.05.2017                         | (22) 21.12.2017                            | (22) 16.03.2017                  |
| (22) 10.11.2016                    | (54) SEPARATOR AND LITHIUM-SULFUR          | (54) INSULATING RESIN MATERIAL,  |
| (54) ADHESIVE TREATMENT FOR FIBER  | BATTERY COMPRISING SAME                    | METAL-LAYER-ATTACHED             |
| FOR POLYMER REINFORCEMENT          | (73) LG Chem, Ltd.                         | INSULATING RESIN MATERIAL USING  |
| AND REINFORCED PRODUCTS            | (72) SONG, Jieun                           | SAME, AND WIRING SUBSTRATE       |
| (73) Gates Corporation (a Delaware | SOHN, Kwonnam                              | (73) Nitto Denko Corporation     |
| corporation)                       | YANG, Doo Kyung                            | (72) KASAGI, Tomoyuki            |
| (72) ANYAOGU, Kelechi C.           | KIM, Yun Kyoung                            | UEMURA, Kou                      |
| KNOX, John Graeme                  | (31) 20160180436                           | IMAMURA, Syunji                  |
| (31) 201562254172 P                | (32) 27.12.2016                            | KITAGAWA, Yuya                   |
| (32) 11.11.2015                    | (33) Korea (Republic)                      | (31) 2016055383                  |
| (33) United States of America      | (51) C08K 3/08                             | 2017047072                       |
| (51) C08J 5/18                     | C08K 3/22                                  | (32) 18.03.2016                  |
| C08K 5/29                          | C08K 5/5415                                | 13.03.2017                       |
| C08L 67/02                         | C08K 7/16                                  | (33) Japan                       |
| C08L 67/04                         | C08L 83/04                                 | Japan                            |
| C08L 79/00                         | C09K 5/14                                  | (51) C08K 5/00                   |
| (11) EP3475359                     | (11) EP3299419                             | C08K 5/34                        |
| (21) EP17728111.0                  | (21) EP16799894.7                          | C08L 1/00                        |
| (47) 07.07.2021                    | (47) 07.07.2021                            | C09K 21/10                       |
| (87) EP2017062947                  | (87) JP2016064724                          | D01F 1/07                        |
| 28.12.2017                         | 01.12.2016                                 | D01F 2/00                        |
| (22) 30.05.2017                    | (22) 18.05.2016                            | (11) EP3117032                   |
| (54) HYDROLYSIS STABLE             | (54) THERMALLY CONDUCTIVE                  | (21) EP15707969.0                |
| COMPOSITIONS FOR FILMS IN SOLAR    | COMPOSITION                                | (47) 07.07.2021                  |
| CELLS                              | (73) Momentive Performance Materials Japan | (87) EP2015054649                |
| (73) LANXESS Deutschland GmbH      | LLC                                        | 17.09.2015                       |
| (72) LAUFER, Wilhelm               | (72) TAKANASHI Masanori                    | (22) 05.03.2015                  |
| (31) 16175623                      | HIRAKAWA Daigo                             | (54) FLAME RETARDANT SHAPED      |
| (32) 22.06.2016                    | (31) 2015104112                            | OBJECTS MADE FROM CELLULOSE      |
| (33) European Patent Office (EPO)  | (32) 22.05.2015                            | PRODUCED BY A DIRECT SOLUTION    |
| (51) C08J 9/12                     | (33) Japan                                 | PROCESS                          |
| C08J 9/16                          | (51) C08K 3/36                             | (73) Smartpolymer GmbH           |
| C08J 9/18                          | C08K 5/5419                                | (72) NIEMZ, Frank-Günter         |
| C08J 9/232                         | C08K 5/5425                                | KRIEG, Marcus                    |
| (11) EP3546506                     | C08K 9/06                                  | MOOZ, Michael                    |
| (21) EP17874696.2                  | C08K 13/06                                 | BAUER, Ralf-Uwe                  |
| (47) 14.07.2021                    | C08L 23/00                                 | RIEDE, Sabine                    |
| (87) JP2017041051                  | C08L 23/22                                 | (31) 102014003455                |
| 31.05.2018                         | C09C 1/30                                  | (32) 11.03.2014                  |
| (22) 15.11.2017                    | (11) EP3402840                             | (33) Germany                     |
| (54) EXPANDED THERMOPLASTIC        | (21) EP17739033.3                          | (51) C08K 5/00                   |
| POLYURETHANE PARTICLES AND         | (47) 14.07.2021                            | C08L 23/06                       |
| EXPANDED THERMOPLASTIC             | (87) US2017013407                          | C08L 23/12                       |
| POLYURETHANE PARTICLE MOLDED       | 20.07.2017                                 | C08L 51/06                       |
| ARTICLE                            | (22) 13.01.2017                            | C08L 53/00                       |
| (73) JSP Corporation               | (54) HEAT CURABLE ELASTOMER                | G02B 6/44                        |
| (72) HAYASHI, Tatsuya              | COMPOSITIONS                               | H01B 3/44                        |
| KOSHITA, Nobumasa                  | (73) Henkel IP & Holding GmbH              | (11) EP3387065                   |
| OIKAWA, Masaharu                   | (72) DECATO, Alfred A.                     | (21) EP16816128.9                |
| (31) 2016230178                    | JIN, Shuhua                                | (47) 14.07.2021                  |
| (32) 28.11.2016                    | (31) 201662279280 P                        | (87) US2016065109                |
| (33) Japan                         | (32) 15.01.2016                            | 15.06.2017                       |
| (51) C08K 3/06                     | (33) United States of America              | (22) 06.12.2016                  |
| H01M 4/38                          | (51) C08K 3/36                             | (54) HIGH MODULUS OLEFIN         |
| H01M 4/136                         | C08K 7/26                                  | COMPOUNDS FOR FIBER OPTIC        |
| H01M 10/052                        | C08K 9/06                                  | CABLE BUFFER TUBES               |
| H01M 50/409                        | H01B 3/00                                  | (73) Dow Global Technologies LLC |
| H01M 50/411                        | H01B 3/44                                  | (72) SEVEN, Karl, M.             |
| H01M 50/414                        | H01B 3/48                                  | ESSEGHIR, Mohamed                |
| H01M 50/417                        | H05K 1/03                                  | (31) 201562265735 P              |
| H01M 50/431                        | H05K 3/02                                  | (32) 10.12.2015                  |
| H01M 50/449                        | H05K 3/38                                  | (33) United States of America    |



|                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) C08K 5/05<br>C08K 5/09<br>C08L 95/00                                                                                                                                                              | (11) EP3286276<br>(21) EP16717899.5<br>(47) 07.07.2021                                                                                                                                                                                                                                               | (87) JP2016057977<br>29.09.2016<br>(22) 14.03.2016                                                                                                                                                                                |
| (11) EP3681953<br>(21) EP18778388.1<br>(47) 14.07.2021                                                                                                                                                 | (87) EP2016058501<br>27.10.2016<br>(22) 18.04.2016                                                                                                                                                                                                                                                   | (54) RESIN MOLDED BODY AND METHOD<br>FOR PRODUCING SAME                                                                                                                                                                           |
| (87) EP2018074737<br>21.03.2019<br>(22) 13.09.2018                                                                                                                                                     | (54) ADHESIVE COMPOSITION<br>HAVING IMPROVED DELTA-ALPHA<br>TOLERANCE, ASSOCIATED JOINING<br>METHOD AND OBTAINABLE<br>COMPOSITE WORKPIECE                                                                                                                                                            | (73) Rimtec Corporation<br>(72) KAMEI, Nobuto<br>(31) 2015065066<br>(32) 26.03.2015<br>(33) Japan                                                                                                                                 |
| (54) BITUMEN-BASED MATERIAL<br>(73) J. Rettenmaier & Söhne GmbH + Co. KG<br>(72) GÜNTNER, Roland<br>(31) 102017008589<br>(32) 13.09.2017<br>(33) Germany                                               | (73) Volkswagen Aktiengesellschaft<br>(72) BEHRENDT, Reiner, Nico<br>(31) 102015207110<br>(32) 20.04.2015<br>(33) Germany                                                                                                                                                                            | (51) C08L 69/00<br>(11) EP3504274<br>(21) EP17758628.6<br>(47) 07.07.2021<br>(87) IB2017054635<br>01.03.2018<br>(22) 28.07.2017                                                                                                   |
| (51) C08K 5/14<br>C08L 9/00<br>C08L 21/00                                                                                                                                                              | (51) C08L 25/12<br>C08L 25/14<br>C08L 51/04                                                                                                                                                                                                                                                          | (54) HOUSINGS FOR CONSUMER<br>DEVICES INCLUDING<br>POLYCARBONATE-POLYCARBONATE/<br>POLYSILOXANE COMPOSITIONS<br>HAVING HIGH FLOW, HIGH IMPACT<br>AND GOOD RELEASE PROPERTIES                                                      |
| (11) EP2963085<br>(21) EP14757363.8<br>(47) 14.07.2021                                                                                                                                                 | (11) EP3409721<br>(21) EP17888907.7<br>(47) 14.07.2021                                                                                                                                                                                                                                               | (73) SHPP Global Technologies B.V.<br>(72) MARTINEZ CANOVAS, Maria Dolores<br>VAN DER MEE, Mark Adrianus Johannes<br>VAN DE GRAMPPEL, Robert Dirk<br>BRUSS, Erhard                                                                |
| (87) JP2014051659<br>04.09.2014<br>(22) 27.01.2014                                                                                                                                                     | (87) KR2017014148<br>05.07.2018<br>(22) 05.12.2017                                                                                                                                                                                                                                                   | (31) 16382404<br>(32) 23.08.2016<br>(33) European Patent Office (EPO)                                                                                                                                                             |
| (54) TRANSPARENT AND TOUGH RUBBER<br>COMPOSITION<br>(73) CARIFLEX PTE. LTD.<br>(72) NAITO Fumio<br>NAKAZAWA Yoshikatsu<br>(31) 2013040121<br>(32) 28.02.2013<br>(33) Japan                             | (54) THERMOPLASTIC RESIN<br>COMPOSITION, PREPARATION<br>METHOD THEREFOR AND<br>MANUFACTURED MOLDED ARTICLE<br>CONTAINING SAME<br>(73) LG Chem, Ltd.<br>(72) PARK, Chun Ho<br>HWANG, Yong Yeon<br>OH, Hyun Taek<br>AHN, Bong Keun<br>KIM, Min Jung<br>KANG, Eun Soo<br>AN, Yong Hee<br>PARK, Jang Won | (51) C08L 75/04<br>H03K 17/96<br>(11) EP3027686<br>(21) EP14750290.0<br>(47) 14.07.2021<br>(87) US2014048766<br>05.02.2015<br>(22) 30.07.2014                                                                                     |
| (87) US2013072988<br>11.06.2015<br>(22) 04.12.2013                                                                                                                                                     | (31) 2017000097<br>(32) 02.01.2017<br>(33) Korea (Republic)                                                                                                                                                                                                                                          | (54) THERMALLY CONDUCTIVE<br>DIELECTRIC FOR<br>THERMOFORMABLE CIRCUITS                                                                                                                                                            |
| (54) HEAT RESISTANT ETHYLENE<br>VINYL ACETATE COPOLYMER<br>COMPOSITION AND PROCESS FOR<br>ITS PRODUCTION<br>(73) E. I. du Pont de Nemours and Company<br>(72) ORIANI, Steven R.<br>STEWART, Mark Aaron | (51) C08L 27/16<br>C09D 127/16<br>H01L 41/193<br>H01L 41/317<br>(11) EP3665225<br>(21) EP18739887.0<br>(47) 07.07.2021                                                                                                                                                                               | (73) E. I. du Pont de Nemours and Company<br>(72) ARANCIO, Vincenzo<br>DORFMAN, Jay Robert<br>(31) 201361860288 P<br>201361888544 P<br>(32) 31.07.2013<br>09.10.2013<br>(33) United States of America<br>United States of America |
| (51) C08K 5/3492<br>C08K 5/52<br>C08K 5/5313                                                                                                                                                           | (87) EP2018069677<br>14.02.2019<br>(22) 19.07.2018                                                                                                                                                                                                                                                   | (51) C08L 75/04<br>H03K 17/96<br>H05K 1/00<br>(11) EP3027687<br>(21) EP14750291.8<br>(47) 14.07.2021                                                                                                                              |
| (11) EP3290470<br>(21) EP17173608.5<br>(47) 14.07.2021                                                                                                                                                 | (54) FORMULATIONS BASED ON<br>ELECTROACTIVE FLUOROPOLYMERS<br>FOR ACTUATORS<br>(73) Arkema France<br>(72) DOMINGUES DOS SANTOS, Fabrice<br>CHOI, Seung Tae<br>TRAN, Hung Viet                                                                                                                        | (87) US2014048770<br>05.02.2015<br>(22) 30.07.2014                                                                                                                                                                                |
| (22) 31.05.2017                                                                                                                                                                                        | (31) 1757603<br>(32) 09.08.2017<br>(33) France                                                                                                                                                                                                                                                       | (54) FLEXIBLE WHITE REFLECTIVE<br>DIELECTRIC FOR ELECTRONIC<br>CIRCUITS                                                                                                                                                           |
| (54) THERMOPLASTIC MOULDING<br>MATERIALS<br>(73) LANXESS Deutschland GmbH<br>(72) ENDTNER, Jochen<br>BIENMÜLLER, Matthias<br>(31) 16186758<br>(32) 01.09.2016<br>(33) European Patent Office (EPO)     | (51) C08L 65/00<br>C08L 79/00<br>C08J 7/04<br>(11) EP3275649<br>(21) EP16768526.2<br>(47) 14.07.2021                                                                                                                                                                                                 | (73) E. I. du Pont de Nemours and Company<br>(72) DORFMAN, Jay Robert<br>(31) 201361860293 P<br>(32) 31.07.2013<br>(33) United States of America                                                                                  |
| (51) C08L 23/10<br>C09J 5/06<br>C09J 11/08<br>C09J 163/00<br>F16B 11/00                                                                                                                                |                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) C09B 7/12<br>C09B 67/44<br>C09B 67/54<br>D06P 1/22<br>(11) EP3441431<br>(21) EP17185980.4<br>(47) 14.07.2021<br>(22) 11.08.2017<br>(54) METHODS OF MAKING LEUCOINDIGO<br>SALT SOLUTIONS WITH VERY LOW<br>ANILINE CONTENT<br>(73) Archroma IP GmbH<br>(72) LUCIC, Erwin<br>HÜBNER, Jörg,<br>HYETT, David<br>JANSSEN, Michèle Catherine<br>Christianne<br>BESSEMBINDER, Karin Hendrika Maria<br>WOESTENBORGH, Pierre L.<br>RIJKERS, Marinus Petrus Wilhelmus<br>Maria | (73) Kindeva Drug Delivery L.P.<br>(72) JINKS, Philip A.<br>AUDENAERT, Frans<br>(31) 201409095<br>201504277<br>(32) 22.05.2014<br>13.03.2015<br>(33) United Kingdom<br>United Kingdom                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (72) MIYAMAE, Nobuhiro<br>OHTA, Tatsuo<br>INBE, Toshio<br>(31) 2016109157<br>(32) 31.05.2016<br>(33) Japan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| (51) C09B 67/22<br>C09B 67/46<br>G02B 26/00<br>G02F 1/167<br>(11) EP3077461<br>(21) EP14827729.6<br>(47) 07.07.2021<br>(87) EP2014003073<br>11.06.2015<br>(22) 18.11.2014<br>(54) PROCESS FOR THE PREPARATION<br>OF DISPERSED COLOURED OR<br>BLACK PARTICLES<br>(73) Merck Patent GmbH<br>The Queen's University of Belfast<br>(72) FARRAND, Louise Diane<br>TOPPING, Claire<br>NORMAN, Sarah<br>(31) 13005608<br>(32) 02.12.2013<br>(33) European Patent Office (EPO)   | (51) C09D 5/00<br>(11) EP3470474<br>(21) EP18199206.6<br>(47) 07.07.2021<br>(22) 08.10.2018<br>(54) WATERBORNE DAMPING<br>COMPOSITION<br>(73) Dow Global Technologies LLC<br>Rohm and Haas Company<br>(72) BAIKERIKAR, Kiran K.<br>DRUMRIGHT, Ray E.<br>FU, Zhenwen<br>GIMBAL, Justin<br>GORIN, Craig F.<br>LANGILLE, Mark<br>(31) 201762570707 P<br>(32) 11.10.2017<br>(33) United States of America                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (51) C09D 7/00<br>(11) EP3464488<br>(21) EP17733210.3<br>(47) 14.07.2021<br>(87) US2017033960<br>14.12.2017<br>(22) 23.05.2017<br>(54) REFRACTORY COATING MATERIAL<br>CONTAINING LOW BIOPERSISTENT<br>FIBERS AND METHOD FOR MAKING<br>THE SAME<br>(73) Unifrax I LLC<br>(72) GEISE, Matthew<br>DE SOUZA, Mauricio Munhoz<br>(31) 201662345983 P<br>(32) 06.06.2016<br>(33) United States of America                                                                                                                                                                                                                                            |
| (51) C09D 1/00<br>C09D 5/24<br>C09D 5/32<br>F16B 19/10<br>(11) EP3584289<br>(21) EP19175415.9<br>(47) 07.07.2021<br>(22) 20.05.2019<br>(54) BLIND FASTENER SYSTEM WITH<br>ELECTROMAGNETIC EFFECTS-<br>PROTECTIVE COATING<br>(73) The Boeing Company<br>(72) SIMPSON, Blake A.<br>ELLSWORTH, Dave G.<br>HOLLEY, Stephen G.<br>WARE, Michael Howard-Edward<br>COWELL, Casey M.<br>(31) 201816011162<br>(32) 18.06.2018<br>(33) United States of America                    | (51) C09D 5/00<br>(11) EP3556816<br>(21) EP19169120.3<br>(47) 14.07.2021<br>(22) 12.04.2019<br>(54) AQUEOUS DISPERSION OF KETO-<br>AND PHOSPHORUS ACID MONOMER-<br>FUNCTIONALIZED POLYMER<br>PARTICLES<br>(73) Dow Global Technologies LLC<br>Rohm and Haas Company<br>(72) BOHLING, James C.<br>LUO, Pu<br>ZHANG, Qing<br>(31) 201862659354 P<br>(32) 18.04.2018<br>(33) United States of America                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | (51) C09D 11/033<br>C09D 11/037<br>C09D 11/102<br>(11) EP3458530<br>(21) EP16916998.4<br>(47) 14.07.2021<br>(87) US2016053726<br>29.03.2018<br>(22) 26.09.2016<br>(54) AQUEOUS INK COMPOSITIONS<br>(73) Hewlett-Packard Development Company,<br>L.P.<br>(72) RAHIMI, Alireza<br>SARKISIAN, George                                                                                                                                                                                                                                                                                                                                              |
| (51) C09D 4/00<br>(11) EP3561004<br>(21) EP19179530.1<br>(47) 14.07.2021<br>(22) 20.05.2015<br>(54) COATED COMPONENT                                                                                                                                                                                                                                                                                                                                                     | (51) C09D 5/00<br>(11) EP3626785<br>(21) EP18195619.4<br>(47) 07.07.2021<br>(22) 20.09.2018<br>(54) METAL PASTE AND ITS USE FOR<br>JOINING COMPONENTS<br>(73) Heraeus Deutschland GmbH & Co KG<br>(72) Schwarzer, Christian<br>Schmitt, Wolfgang<br>(51) C09D 5/00<br>(11) EP3470474<br>(21) EP18199206.6<br>(47) 07.07.2021<br>(22) 08.10.2018<br>(54) WATERBORNE DAMPING<br>COMPOSITION<br>(73) Dow Global Technologies LLC<br>Rohm and Haas Company<br>(72) BAIKERIKAR, Kiran K.<br>DRUMRIGHT, Ray E.<br>FU, Zhenwen<br>GIMBAL, Justin<br>GORIN, Craig F.<br>LANGILLE, Mark<br>(31) 201762570707 P<br>(32) 11.10.2017<br>(33) United States of America<br>(51) C09D 5/00<br>(11) EP3556816<br>(21) EP19169120.3<br>(47) 14.07.2021<br>(22) 12.04.2019<br>(54) AQUEOUS DISPERSION OF KETO-<br>AND PHOSPHORUS ACID MONOMER-<br>FUNCTIONALIZED POLYMER<br>PARTICLES<br>(73) Dow Global Technologies LLC<br>Rohm and Haas Company<br>(72) BOHLING, James C.<br>LUO, Pu<br>ZHANG, Qing<br>(31) 201862659354 P<br>(32) 18.04.2018<br>(33) United States of America<br>(51) C09D 5/44<br>C09D 163/00<br>C25D 13/10<br>C25D 15/00<br>(11) EP3467056<br>(21) EP17806645.2<br>(47) 14.07.2021<br>(87) JP2017020005<br>07.12.2017<br>(22) 30.05.2017<br>(54) CATIONIC ELECTRODEPOSITION<br>COATING COMPOSITION<br>(73) Nippon Paint Automotive Coatings Co.,<br>Ltd. | (51) C09D 11/14<br>C09D 11/328<br>C09D 11/36<br>(11) EP3470478<br>(21) EP18205960.0<br>(47) 07.07.2021<br>(22) 27.10.2017<br>(54) INK COMPOSITION FOR LIQUID JET<br>PRINTING<br>(73) Dover Europe Sàrl<br>(72) DE SAINT ROMAIN, Pierre<br>(31) 1660562<br>(32) 31.10.2016<br>(33) France<br>(51) C09D 125/00<br>(11) EP3494187<br>(21) EP17754272.7<br>(47) 14.07.2021<br>(87) EP2017068837<br>08.02.2018<br>(22) 26.07.2017<br>(54) NEW BIO-RECOGNITION ELEMENTS<br>(73) BASF SE<br>(72) KONRAD, Rupert<br>KELLERMEIER, Matthias<br>STENGEL, Peter<br>(31) 16182572<br>(32) 03.08.2016<br>(33) European Patent Office (EPO)<br>(51) C09J 1/00 |

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| C09J 5/04                                      | World Intellectual Property Office (WIPO) | H01B 1/22                                 |
| (11) EP3402855                                 | World Intellectual Property Office (WIPO) | (11) EP3524653                            |
| (21) EP17700257.3                              | (51) C09J 7/00                            | (21) EP18155909.7                         |
| (47) 14.07.2021                                | (11) EP2966138                            | (47) 07.07.2021                           |
| (87) EP2017050606                              | (21) EP14833722.3                         | (22) 09.02.2018                           |
| 20.07.2017                                     | (47) 14.07.2021                           | (54) ELECTRICALLY CONDUCTIVE              |
| (22) 12.01.2017                                | (87) KR2014007239                         | COMPOSITION                               |
| (54) CURE OF ANAEROBIC                         | 12.02.2015                                | (73) Heraeus Deutschland GmbH & Co. KG    |
| COMPOSITIONS                                   | (22) 05.08.2014                           | (72) STRÜBEN, Jan                         |
| (73) Henkel IP & Holding GmbH                  | (54) ADHESIVE COMPOSITION,                | FRITZSCHE, Sebastian                      |
| (72) HOULIHAN, Jim                             | ADHESIVE FILM, AND METHOD                 | DICKEL, Tanja                             |
| SWEENEY, Nigel                                 | FOR MANUFACTURING ORGANIC                 | STAAB, Janine                             |
| DEEGAN, Brian                                  | ELECTRONIC DEVICE USING SAME              | (51) C09J 11/06                           |
| KNEAFSEY, Brendan                              | (73) LG Chem, Ltd.                        | C09J 183/05                               |
| (31) 201600811                                 | (72) BAE, Kyung Yul                       | C09J 183/07                               |
| (32) 15.01.2016                                | YOO, Hyun Jee                             | H01L 33/56                                |
| (33) United Kingdom                            | CHO, Yoon Gyung                           | (11) EP3121236                            |
| (51) C09J 4/06                                 | CHANG, Suk Ky                             | (21) EP14873808.1                         |
| C09J 11/04                                     | (31) 20130092782                          | (47) 14.07.2021                           |
| C09J 11/06                                     | 20140040828                               | (87) CN2014091734                         |
| C09J 11/08                                     | (32) 05.08.2013                           | 02.07.2015                                |
| C09J 163/00                                    | 04.04.2014                                | (22) 20.11.2014                           |
| (11) EP3508541                                 | (33) Korea (Republic)                     | (54) CURABLE SILICON RUBBER               |
| (21) EP18809891.7                              | Korea (Republic)                          | COMPOSITION FOR LED PACKAGING             |
| (47) 14.07.2021                                | (51) C09J 7/00                            | (73) Elkem Silicones Shanghai Co., Ltd.   |
| (87) KR2018005987                              | (11) EP2966137                            | (72) JIA, Liya                            |
| 06.12.2018                                     | (21) EP14835324.6                         | ZHAO, Shifang                             |
| (22) 25.05.2018                                | (47) 14.07.2021                           | YANG, Yili                                |
| (54) TWO-COMPONENT ADHESIVE                    | (87) KR2014007235                         | (31) 201310737774                         |
| COMPOSITION                                    | 12.02.2015                                | (32) 27.12.2013                           |
| (73) LG Chem, Ltd.                             | (22) 05.08.2014                           | (33) China                                |
| (72) OH, Wan Kyu                               | (54) ADHESIVE FILM AND METHOD FOR         | (51) C09J 11/08                           |
| CHOI, Gyeong Shin                              | PRODUCING ORGANIC ELECTRONIC              | C09J 163/00                               |
| PARK, Seung Young                              | DEVICE USING SAME                         | C09J 175/04                               |
| (31) 20170069237                               | (73) LG Chem, Ltd.                        | C09J 175/08                               |
| 20180058409                                    | (72) YOO, Hyun Jee                        | (11) EP3623439                            |
| (32) 02.06.2017                                | CHANG, Suk Ky                             | (21) EP18798428.1                         |
| 23.05.2018                                     | CHO, Yoon Gyung                           | (47) 07.07.2021                           |
| (33) Korea (Republic)                          | BAE, Kyung Yul                            | (87) KR2018005296                         |
| Korea (Republic)                               | (31) 20130092782                          | 15.11.2018                                |
| (51) C09J 7/00                                 | 20140040817                               | (22) 09.05.2018                           |
| (11) EP3105054                                 | (32) 05.08.2013                           | (54) STRUCTURAL ADHESIVE                  |
| (21) EP14881824.8                              | 04.04.2014                                | COMPOSITION HAVING HIGH                   |
| (47) 07.07.2021                                | (33) Korea (Republic)                     | ELONGATION AND IMPACT                     |
| (87) FI2014050765                              | Korea (Republic)                          | RESISTANCE                                |
| 13.08.2015                                     | (51) C09J 7/10                            | (73) Pusan National University Industry - |
| (22) 08.10.2014                                | C09J 7/20                                 | University Cooperation Foundation         |
| (54) LINERLESS WASHABLE LABEL,                 | (11) EP2963095                            | (72) CHOE, Young Son                      |
| APPARATUS AND METHOD FOR                       | (21) EP14835409.5                         | BANG, Joona                               |
| PREPARING A LABEL                              | (47) 14.07.2021                           | MOON, Jun Soo                             |
| (73) UPM Raflatac Oy                           | (87) KR2014007243                         | (31) 20170059012                          |
| (72) MITCHELL, Noel                            | 12.02.2015                                | (32) 12.05.2017                           |
| KORMAN, Klaudia                                | (22) 05.08.2014                           | (33) Korea (Republic)                     |
| FORSSTRÖM, Jan-Erik                            | (54) ADHESIVE FILM AND METHOD             | (51) C09J 101/10                          |
| SAXBERG, Tom                                   | FOR MANUFACTURING ORGANIC                 | C09J 105/00                               |
| (31) PCT/FI2014/050095                         | ELECTRONIC DEVICE USING SAME              | C09J 189/06                               |
| PCT/FI2014/050096                              | (73) LG Chem, Ltd.                        | E04B 1/74                                 |
| PCT/FI2014/050097                              | (72) BAE, Kyung Yul                       | D04H 1/64                                 |
| PCT/FI2014/050098                              | YOO, Hyun Jee                             | C03C 25/10                                |
| PCT/FI2014/050099                              | CHO, Yoon Gyung                           | C03C 25/26                                |
| (32) 10.02.2014                                | YANG, Se Woo                              | (11) EP3455183                            |
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| 10.02.2014                                     | 20140040825                               | (47) 07.07.2021                           |
| 10.02.2014                                     | (32) 05.08.2013                           | (87) EP2017061419                         |
| 10.02.2014                                     | 04.04.2014                                | 16.11.2017                                |
| (33) World Intellectual Property Office (WIPO) | (33) Korea (Republic)                     | (22) 11.05.2017                           |
| World Intellectual Property Office (WIPO)      | Korea (Republic)                          |                                           |
| World Intellectual Property Office (WIPO)      | (51) C09J 9/02                            |                                           |

|                                                                                                            |                                                                                                      |                                                                                              |
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| (54) BINDER COMPOSITION FOR MINERAL FIBERS COMPRISING AT LEAST ONE HYDROCOLLOID.                           | SEETON, Christopher, J.<br>WILSON, David, P.<br>YANA MOTTA, Samuel, F.                               | WANG, Wei Jun<br>HUANG, Hong Min                                                             |
| (73) Rockwool International A/S                                                                            | SPATZ, Mark, W.                                                                                      | (51) C09K 5/06                                                                               |
| (72) HJELMGAARD, Thomas                                                                                    | (31) 41474                                                                                           | H01L 23/373                                                                                  |
| (31) 16169635                                                                                              | 43486                                                                                                | H01L 23/42                                                                                   |
| 16169638                                                                                                   | (32) 01.04.2008                                                                                      | (11) EP3426746                                                                               |
| 16169641                                                                                                   | 09.04.2008                                                                                           | (21) EP16893005.5                                                                            |
| (32) 13.05.2016                                                                                            | (33) United States of America                                                                        | (47) 14.07.2021                                                                              |
| 13.05.2016                                                                                                 | United States of America                                                                             | (87) CN2016075827                                                                            |
| 13.05.2016                                                                                                 | (51) C09K 5/04                                                                                       | 14.09.2017                                                                                   |
| (33) European Patent Office (EPO)                                                                          | F25B 43/00                                                                                           | (22) 08.03.2016                                                                              |
| European Patent Office (EPO)                                                                               | (11) EP2433061                                                                                       | (54) PHASE CHANGE MATERIAL                                                                   |
| European Patent Office (EPO)                                                                               | (21) EP10722203.6                                                                                    | (73) Honeywell International Inc.                                                            |
| (51) C09J 123/14                                                                                           | (47) 07.07.2021                                                                                      | (72) ZHANG, Bright                                                                           |
| (11) EP3058043                                                                                             | (87) JP2010058950                                                                                    | WANG, Wei Jun                                                                                |
| (21) EP14789694.8                                                                                          | 25.11.2010                                                                                           | LIU, Ya Qun                                                                                  |
| (47) 14.07.2021                                                                                            | (22) 20.05.2010                                                                                      | HUANG, Hong Min                                                                              |
| (87) US2014059250                                                                                          | (54) REFRIGERATION APPARATUS                                                                         | (51) C09K 8/035                                                                              |
| 23.04.2015                                                                                                 | (73) Panasonic Corporation                                                                           | (11) EP3140363                                                                               |
| (22) 06.10.2014                                                                                            | (72) SATO, Shigehiro                                                                                 | (21) EP15723085.5                                                                            |
| (54) HIGH POLYMER LOAD POLYOLEFIN ADHESIVE COMPOSITIONS                                                    | (31) 2009122893                                                                                      | (47) 07.07.2021                                                                              |
| (73) ExxonMobil Chemical Patents Inc.                                                                      | (32) 21.05.2009                                                                                      | (87) US2015029004                                                                            |
| (72) SCHROEYERS, Jurgen J.                                                                                 | (33) Japan                                                                                           | 12.11.2015                                                                                   |
| AUSTIN, Jennifer J.                                                                                        | (51) C09K 5/06                                                                                       | (22) 04.05.2015                                                                              |
| MOWRY, Shawn W.                                                                                            | C09K 5/12                                                                                            | (54) DRILLING FLUID AND PROCESS OF MAKING THE SAME                                           |
| COFFEY, James N.                                                                                           | (11) EP2949722                                                                                       | (73) Ineos USA, LLC                                                                          |
| (31) 201361892826 P                                                                                        | (21) EP14742973.2                                                                                    | (72) DEAN, Georgia                                                                           |
| (32) 18.10.2013                                                                                            | (47) 14.07.2021                                                                                      | BAGHERI, Vahid                                                                               |
| (33) United States of America                                                                              | (87) CN2014070967                                                                                    | (31) 201461990371 P                                                                          |
| (51) C09K 5/04                                                                                             | 31.07.2014                                                                                           | (32) 08.05.2014                                                                              |
| C10M 105/38                                                                                                | (22) 21.01.2014                                                                                      | (33) United States of America                                                                |
| C10M 171/00                                                                                                | (54) NANOMETER MOLTEN SALT HEAT-TRANSFER AND HEAT-STORAGE MEDIUM, PREPARATION METHOD AND USE THEREOF | (51) C09K 11/06                                                                              |
| C10N 30/02                                                                                                 | (73) Shenzhen Enesoon Science & Technology Co., Ltd.                                                 | H01L 27/32                                                                                   |
| C10N 40/30                                                                                                 | (72) ZENG, ZhiYong                                                                                   | H01L 51/54                                                                                   |
| (11) EP3313965                                                                                             | (31) 201310029569                                                                                    | (11) EP3636726                                                                               |
| (21) EP16729708.4                                                                                          | 201310053597                                                                                         | (21) EP19209591.7                                                                            |
| (47) 07.07.2021                                                                                            | 201310732781                                                                                         | (47) 14.07.2021                                                                              |
| (87) US2016034947                                                                                          | 201310731910                                                                                         | (22) 13.05.2016                                                                              |
| 29.12.2016                                                                                                 | (32) 25.01.2013                                                                                      | (54) MULTI-COMPONENT HOST MATERIAL AND ORGANIC ELECTROLUMINESCENT DEVICE COMPRISING THE SAME |
| (22) 31.05.2016                                                                                            | 19.02.2013                                                                                           | (73) Rohm And Haas Electronic Materials Korea Ltd.                                           |
| (54) WORKING FLUIDS COMPRISING FLUORINATED OLEFINS AND POLYOL ESTERS                                       | 26.12.2013                                                                                           | (72) PARK, Kyoung-Jin                                                                        |
| (73) LANXESS Corporation                                                                                   | 26.12.2013                                                                                           | KIM, Bitnari                                                                                 |
| (72) BENANTI, Travis                                                                                       | (33) China                                                                                           | DOH, Yoo-Jin                                                                                 |
| URREGO, Roberto                                                                                            | China                                                                                                | KANG, Hyun-Ju                                                                                |
| HESELLE, Edward T.                                                                                         | China                                                                                                | LIM, Young-Mook                                                                              |
| (31) 201562185341 P                                                                                        | China                                                                                                | LEE, Su-Hyun                                                                                 |
| (32) 26.06.2015                                                                                            | (51) C09K 5/06                                                                                       | KIM, Chi-Sik                                                                                 |
| (33) United States of America                                                                              | C09K 5/14                                                                                            | (31) 20150091223                                                                             |
| (51) C09K 5/04                                                                                             | H01L 23/373                                                                                          | 20160002171                                                                                  |
| C10M 171/00                                                                                                | (11) EP3227399                                                                                       | 20160048912                                                                                  |
| F16N 17/00                                                                                                 | (21) EP14907530.1                                                                                    | (32) 26.06.2015                                                                              |
| F16N 39/02                                                                                                 | (47) 14.07.2021                                                                                      | 07.01.2016                                                                                   |
| (11) EP2260231                                                                                             | (87) CN2014093138                                                                                    | 21.04.2016                                                                                   |
| (21) EP09726796.7                                                                                          | 09.06.2016                                                                                           | (33) Korea (Republic)                                                                        |
| (47) 14.07.2021                                                                                            | (22) 05.12.2014                                                                                      | Korea (Republic)                                                                             |
| (87) US2009039163                                                                                          | (54) HIGH PERFORMANCE THERMAL INTERFACE MATERIALS WITH LOW THERMAL IMPEDANCE                         | Korea (Republic)                                                                             |
| 08.10.2009                                                                                                 | (73) Honeywell International Inc.                                                                    | (51) C10G 25/00                                                                              |
| (22) 01.04.2009                                                                                            | (72) ZHANG, Bright                                                                                   | C10G 67/06                                                                                   |
| (54) METHODS FOR USING TWO-PHASE REFRIGERANT-LUBRICANT MIXTURES IN VAPOR-COMPRESSION REFRIGERATION DEVICES | SHEN, Ling                                                                                           | (11) EP2640811                                                                               |
| (73) Honeywell International Inc.                                                                          | WANG, Hui                                                                                            | (21) EP11807796.5                                                                            |
| (72) THOMAS, Raymond, H.                                                                                   | LIU, Ya Qun                                                                                          | (47) 14.07.2021                                                                              |
|                                                                                                            |                                                                                                      | (87) IN2011000795                                                                            |
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|                                           |                                          |                                     |
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| (22) 16.11.2011                           | (54) LUBRICANT COMPOSITIONS              | (72) BALDO, Victor                  |
| (54) A PROCESS FOR DESULFURIZATION        | CONTAINING A HETEROAROMATIC              | GALLO, Francesco                    |
| OF DIESEL WITH REDUCED                    | COMPOUND                                 | (31) 201900000613                   |
| HYDROGEN CONSUMPTION                      | (73) Afton Chemical Corporation          | (32) 15.01.2019                     |
| (73) Indian Oil Corporation Ltd.          | (72) Mathur, Naresh                      | (33) Italy                          |
| (72) KUMAR, Sarvesh                       | Lagona, Jason                            | (51) C11B 3/00                      |
| SHARMA, Alok                              | Loper, John T.                           | C11B 3/04                           |
| KUMAR, Brijesh                            | (31) 201161488302 P                      | C11B 3/10                           |
| RAJAGOPAL, Santanam                       | 201213411065                             | C11B 3/16                           |
| MALHOTRA, Ravinder Kumar                  | (32) 20.05.2011                          | (11) EP3666863                      |
| KUMAR, Anand                              | 02.03.2012                               | (21) EP18211748.1                   |
| (31) 1309KO2010                           | (33) United States of America            | (47) 14.07.2021                     |
| (32) 19.11.2010                           | United States of America                 | (22) 11.12.2018                     |
| (33) India                                | (51) C10M 169/00                         | (54) METHOD FOR THE PURIFICATION OF |
| (51) C10G 35/04                           | C10M 169/04                              | WASTE FATS AND OILS CONTAINING      |
| (11) EP2771432                            | C10N 10/02                               | PLASTIC PARTICLES                   |
| (21) EP12769571.6                         | C10N 10/04                               | (73) BDI Holding GmbH               |
| (47) 14.07.2021                           | C10N 30/08                               | (72) Ernst, Martin                  |
| (87) US2012056306                         | C10N 40/02                               | Raudner, Robert                     |
| 02.05.2013                                | C10N 50/10                               | (51) C11D 1/02                      |
| (22) 20.09.2012                           | C10N 60/02                               | C11D 1/14                           |
| (54) SYSTEM AND METHOD FOR ON             | (11) EP3234079                           | C11D 1/22                           |
| STREAM CATALYST REPLACEMENT               | (21) EP15801328.4                        | C11D 3/20                           |
| (73) Chevron Phillips Chemical Company LP | (47) 07.07.2021                          | C11D 3/34                           |
| (72) MORRISON, Scott G.                   | (87) EP2015002322                        | C11D 3/386                          |
| CHEUNG, Tin-Tack Peter                    | 23.06.2016                               | (11) EP3382003                      |
| BERGMEISTER, Joe, III                     | (22) 19.11.2015                          | (21) EP18166291.7                   |
| MCGAHEE, Vincent D.                       | (54) HIGH-TEMPERATURE LUBRICANTS         | (47) 14.07.2021                     |
| MURRAY, Bruce D.                          | (73) Klüber Lubrication München SE & Co. | (22) 20.12.2012                     |
| HASENBERG, Daniel M.                      | KG                                       | (54) DETERGENT COMPOSITIONS WITH    |
| (31) 201113282066                         | (72) EGERSDÖRFER, Karl                   | LIPASE VARIANTS                     |
| (32) 26.10.2011                           | KILTHAU, Thomas                          | (73) Novozymes A/S                  |
| (33) United States of America             | GRUNDEI, Stefan                          | (72) VIND, Jesper                   |
| (51) C10G 70/04                           | SEEMEYER, Stefan                         | MIKKELSEN, Lise Munch               |
| (11) EP3312261                            | (31) 102014018718                        | MALTEN, Marco                       |
| (21) EP17208134.1                         | (32) 17.12.2014                          | SVENDSEN, Allan                     |
| (47) 14.07.2021                           | (33) Germany                             | BORCH, Kim                          |
| (22) 30.10.2014                           | (51) C10M 171/00                         | (31) 11196000                       |
| (54) METHOD FOR SEPARATING A              | C10N 20/00                               | (32) 29.12.2011                     |
| HYDROCARBON MIXTURE                       | C10N 30/02                               | (33) European Patent Office (EPO)   |
| (73) Linde GmbH                           | C10N 30/06                               | (51) C11D 1/14                      |
| (72) FRITZ, Helmut                        | C10N 30/08                               | C11D 1/29                           |
| SINN, Tobias                              | C10N 30/10                               | C11D 3/20                           |
| (31) 13005355                             | (11) EP2821464                           | C11D 3/37                           |
| (32) 14.11.2013                           | (21) EP13754320.3                        | (11) EP3004310                      |
| (33) European Patent Office (EPO)         | (47) 14.07.2021                          | (21) EP14730720.1                   |
| (51) C10M 129/78                          | (87) JP2013055385                        | (47) 14.07.2021                     |
| C10M 159/12                               | 06.09.2013                               | (87) US2014039098                   |
| (11) EP2977436                            | (22) 28.02.2013                          | 27.11.2014                          |
| (21) EP15170161.2                         | (54) WORKING FLUID COMPOSITION FOR       | (22) 22.05.2014                     |
| (47) 14.07.2021                           | REFRIGERATOR, REFRIGERATION              | (54) LOW PH DETERGENT COMPOSITION   |
| (22) 01.06.2015                           | OIL, AND METHOD FOR PRODUCING            | (73) The Procter & Gamble Company   |
| (54) LUBRICATING OIL COMPOSITIONS         | SAME                                     | (72) DELANEY, Sarah, Ann            |
| (73) Infineum International Limited       | (73) JX Nippon Oil & Energy Corporation  | HOLDER, James, William              |
| (72) Strong, Anthony James                | (72) SAITO Masanori                      | (31) 201361827147 P                 |
| Woodward, Philip James                    | OKIDO Takeshi                            | (32) 24.05.2013                     |
| (31) 14177471                             | SAWADA Ken                               | (33) United States of America       |
| (32) 17.07.2014                           | ADEGAWA Kuniko                           | (51) C11D 1/22                      |
| (33) European Patent Office (EPO)         | (31) 2012046996                          | C11D 1/29                           |
| (51) C10M 133/40                          | (32) 02.03.2012                          | C11D 1/83                           |
| C10M 133/56                               | (33) Japan                               | C11D 3/386                          |
| C10M 163/00                               | (51) C10M 175/00                         | (11) EP3234088                      |
| C10N 30/00                                | (11) EP3683295                           | (21) EP15790151.3                   |
| C10N 40/25                                | (21) EP20151574.9                        | (47) 14.07.2021                     |
| (11) EP2524958                            | (47) 14.07.2021                          | (87) EP2015075794                   |
| (21) EP12167955.9                         | (22) 14.01.2020                          | 23.06.2016                          |
| (47) 07.07.2021                           | (54) REGENERATION OF USED OILS           | (22) 05.11.2015                     |
| (22) 14.05.2012                           | (73) ITELYUM Regeneration S.r.l.         |                                     |

|                                                                                                              |                                                                                             |                                                                                                 |
|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| (54) LIQUID SURFACTANT COMPOSITION WITH SPECIAL SURFACTANT COMBINATION AND ENZYME                            | BROUWERS, Katrien<br>KEULEERS, Robby Renilde Francois<br>VANHECKE, Evelyne Johanna Lutgarde | (33) Germany                                                                                    |
| (73) Henkel AG & Co. KGaA                                                                                    | (31) 19186213                                                                               | (51) C11D 3/33                                                                                  |
| (72) SEILER, Martina                                                                                         | (32) 15.07.2019                                                                             | C11D 3/37                                                                                       |
| NICKEL, Dieter                                                                                               | (33) European Patent Office (EPO)                                                           | C11D 7/32                                                                                       |
| SAHNER, Sonja                                                                                                | (51) C11D 3/16                                                                              | C11D 7/36                                                                                       |
| RAMM, Christian                                                                                              | (11) EP3448974                                                                              | (11) EP2924101                                                                                  |
| O'CONNELL, Timothy                                                                                           | (21) EP17722304.7                                                                           | (21) EP14161314.1                                                                               |
| (31) 102014226681                                                                                            | (47) 07.07.2021                                                                             | (47) 07.07.2021                                                                                 |
| (32) 19.12.2014                                                                                              | (87) US2017029597                                                                           | (22) 24.03.2014                                                                                 |
| (33) Germany                                                                                                 | 02.11.2017                                                                                  | (54) Cleaning agent and method for cleaning dishes                                              |
| (51) C11D 1/72                                                                                               | (22) 26.04.2017                                                                             | (73) Chemische Fabrik Dr. Weigert GmbH & Co KG                                                  |
| C11D 1/83                                                                                                    | (54) DETERGENT COMPOSITION COMPRISING A CARBINOL FUNCTIONAL TRISILOXANE                     | (72) Zwingenberger, Marion                                                                      |
| C11D 11/00                                                                                                   | (73) Dow Silicones Corporation                                                              | Reessing, Petra                                                                                 |
| (11) EP3116984                                                                                               | Dow Toray Co., Ltd.                                                                         | (51) C11D 3/386                                                                                 |
| (21) EP15708228.0                                                                                            | (72) BAUER, Paula Michele                                                                   | C12N 9/54                                                                                       |
| (47) 07.07.2021                                                                                              | CAUVIN, Severine                                                                            | C12N 9/64                                                                                       |
| (87) EP2015054804                                                                                            | JOFFRE, Eric J.                                                                             | C12N 15/70                                                                                      |
| 17.09.2015                                                                                                   | PETROFF, Lenin J.                                                                           | C12N 15/75                                                                                      |
| (22) 09.03.2015                                                                                              | SEVERANCE, Martin K.                                                                        | C12N 15/76                                                                                      |
| (54) IMPROVED SURFACTANT MIXTURE HAVING AN OPTIMIZED ETHOXYLATION DEGREE                                     | SUGIURA, Tsunehito                                                                          | C12N 15/77                                                                                      |
| (73) Henkel AG & Co. KGaA                                                                                    | TAMURA, Seiki                                                                               | C12N 15/78                                                                                      |
| (72) VOCKENROTH, Inga Kerstin                                                                                | WENZLICK, Zachary R.                                                                        | (11) EP3550017                                                                                  |
| BUHL, Andreas                                                                                                | (31) 201662328072 P                                                                         | (21) EP19161744.8                                                                               |
| WIKKER, Eva-Maria                                                                                            | (32) 27.04.2016                                                                             | (47) 14.07.2021                                                                                 |
| BODE, Nicole                                                                                                 | (33) United States of America                                                               | (22) 27.10.2015                                                                                 |
| (31) 102014204389                                                                                            | (51) C11D 3/22                                                                              | (54) SERINE PROTEASES                                                                           |
| (32) 11.03.2014                                                                                              | C11D 3/395                                                                                  | (73) Danisco US Inc.                                                                            |
| (33) Germany                                                                                                 | C11D 7/10                                                                                   | (72) KOLKMAN, Marc                                                                              |
| (51) C11D 1/72                                                                                               | C11D 7/26                                                                                   | KELLETT-SMITH, Anja Hemmingsen                                                                  |
| C11D 3/20                                                                                                    | C11D 17/00                                                                                  | MEJLDAL, Rie                                                                                    |
| C11D 3/386                                                                                                   | C11D 17/06                                                                                  | BABE, Lilia Maria                                                                               |
| C11D 11/00                                                                                                   | (11) EP3464543                                                                              | (31) 201462069184 P                                                                             |
| C11D 17/04                                                                                                   | (21) EP17724574.3                                                                           | (32) 27.10.2014                                                                                 |
| (11) EP3250669                                                                                               | (47) 07.07.2021                                                                             | (33) United States of America                                                                   |
| (21) EP15790156.2                                                                                            | (87) EP2017062255                                                                           | (51) C11D 9/26                                                                                  |
| (47) 07.07.2021                                                                                              | 30.11.2017                                                                                  | C11D 13/16                                                                                      |
| (87) EP2015075799                                                                                            | (22) 22.05.2017                                                                             | (11) EP3110937                                                                                  |
| 04.08.2016                                                                                                   | (54) STABLE BLEACHING COMPOSITION                                                           | (21) EP15707740.5                                                                               |
| (22) 05.11.2015                                                                                              | (73) Firmenich SA                                                                           | (47) 14.07.2021                                                                                 |
| (54) ACID LIQUID COMPACT WASHING AGENT CONTAINING HYDROXYCARBOXYLIC ACID, NON-IONIC SURFACTANT AND AN ENZYME | (72) SHCHERBAKOV, Denis                                                                     | (87) GB2015050550                                                                               |
| (73) Henkel AG & Co. KGaA                                                                                    | STARKENMANN, Christian                                                                      | 03.09.2015                                                                                      |
| (72) MEINE, Georg                                                                                            | BOUQUERAND, Pierre-Etienne                                                                  | (22) 26.02.2015                                                                                 |
| O'CONNELL, Timothy                                                                                           | PACCHIANI, Marco                                                                            | (54) SOAP COMPOSITION                                                                           |
| (31) 102015201702                                                                                            | NORMAND, Valery                                                                             | (73) Cosmotic Warriors Limited                                                                  |
| (32) 30.01.2015                                                                                              | (31) 20166234017 P                                                                          | (72) CONSTANTINE, Mark                                                                          |
| (33) Germany                                                                                                 | (32) 23.05.2016                                                                             | CONSTANTINE, Margaret Joan                                                                      |
| (51) C11D 1/94                                                                                               | (33) United States of America                                                               | AMBROSEN, Helen Elizabeth                                                                       |
| C11D 3/20                                                                                                    | (51) C11D 3/26                                                                              | (31) 201403561                                                                                  |
| C11D 3/22                                                                                                    | C11D 3/28                                                                                   | (32) 28.02.2014                                                                                 |
| C11D 3/37                                                                                                    | C11D 3/386                                                                                  | (33) United Kingdom                                                                             |
| C11D 17/04                                                                                                   | (11) EP3390608                                                                              | (51) C12M 1/00                                                                                  |
| (11) EP3766954                                                                                               | (21) EP16809739.2                                                                           | C12M 1/06                                                                                       |
| (21) EP20153015.1                                                                                            | (47) 07.07.2021                                                                             | C12M 1/26                                                                                       |
| (47) 14.07.2021                                                                                              | (87) EP2016079980                                                                           | C12M 1/34                                                                                       |
| (22) 22.01.2020                                                                                              | 22.06.2017                                                                                  | G01N 1/14                                                                                       |
| (54) CLEANING PRODUCT COMPRISING AN INVERTED CONTAINER ASSEMBLY AND A VISCOUS CLEANING COMPOSITION           | (22) 07.12.2016                                                                             | G01N 1/20                                                                                       |
| (73) The Procter & Gamble Company                                                                            | (54) LIQUID DETERGENTS OR CLEANING AGENTS CONTAINING ACYL HYDRAZONE                         | (11) EP3684908                                                                                  |
| (72) BRAECKMAN, Karl Ghislain                                                                                | (73) Henkel AG & Co. KGaA                                                                   | (21) EP19710580.2                                                                               |
|                                                                                                              | (72) HÄTZELT, André                                                                         | (47) 14.07.2021                                                                                 |
|                                                                                                              | KROPF, Christian                                                                            | (87) AT2019060069                                                                               |
|                                                                                                              | (31) 102015225874                                                                           | 12.09.2019                                                                                      |
|                                                                                                              | (32) 18.12.2015                                                                             | (22) 04.03.2019                                                                                 |
|                                                                                                              |                                                                                             | (54) CONCENTRATION MEASURING DEVICE FOR A CONTAINER WITH SUBSTANTIALLY LIQUID CONTAINER CONTENT |

|                                                                                                                                                                                                                                                                                                |                                                                                                                    |                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| (73) Zeta GmbH                                                                                                                                                                                                                                                                                 | (33) United States of America                                                                                      | (54) CONTROLLED GROWTH OF MICROORGANISMS                                             |
| (72) MAISCHBERGER, Thomas<br>KRAINER, Florian                                                                                                                                                                                                                                                  | (51) C12N 1/19                                                                                                     | (73) Syngulon SA                                                                     |
| (31) 501822018                                                                                                                                                                                                                                                                                 | C12N 9/04                                                                                                          | (72) GABANT, Philippe                                                                |
| (32) 06.03.2018                                                                                                                                                                                                                                                                                | C12P 7/42                                                                                                          | (31) 201361867510 P                                                                  |
| (33) Austria                                                                                                                                                                                                                                                                                   | C12P 7/64                                                                                                          | (32) 19.08.2013                                                                      |
| (51) C12M 1/00                                                                                                                                                                                                                                                                                 | C12R 1/73                                                                                                          | (33) United States of America                                                        |
| C12M 1/12                                                                                                                                                                                                                                                                                      | (11) EP3080252                                                                                                     | (51) C12N 5/07                                                                       |
| G01N 33/50                                                                                                                                                                                                                                                                                     | (21) EP14830951.1                                                                                                  | C12N 5/071                                                                           |
| C12N 5/079                                                                                                                                                                                                                                                                                     | (47) 07.07.2021                                                                                                    | C12N 5/078                                                                           |
| (11) EP3622050                                                                                                                                                                                                                                                                                 | (87) EP2014077237                                                                                                  | (11) EP3221445                                                                       |
| (21) EP18727566.4                                                                                                                                                                                                                                                                              | 18.06.2015                                                                                                         | (21) EP15861206.9                                                                    |
| (47) 07.07.2021                                                                                                                                                                                                                                                                                | (22) 10.12.2014                                                                                                    | (47) 14.07.2021                                                                      |
| (87) US2018031792                                                                                                                                                                                                                                                                              | (54) YEAST STRAINS AND METHODS FOR THE PRODUCTION OF -HYDROXY FATTY ACIDS AND DICARBOXYLIC ACIDS                   | (87) US2015061781                                                                    |
| 15.11.2018                                                                                                                                                                                                                                                                                     | (73) Provivi, Inc.                                                                                                 | 26.05.2016                                                                           |
| (22) 09.05.2018                                                                                                                                                                                                                                                                                | (72) GATTER, Michael                                                                                               | (22) 20.11.2015                                                                      |
| (54) CELL-MIMETIC DEVICE                                                                                                                                                                                                                                                                       | MATTHÄUS, Falk                                                                                                     | (54) COMPOSITIONS AND METHODS RELATED TO HEMATOLOGIC RECOVERY                        |
| (73) Massachusetts Institute of Technology                                                                                                                                                                                                                                                     | BARTH, Gerold                                                                                                      | (73) The Regents of the University of California                                     |
| (72) ESPINOSA-HOYOS, Daniela                                                                                                                                                                                                                                                                   | (31) 102013022175                                                                                                  | (72) CHUTE, John                                                                     |
| JAGIELSKA, Anna, E.                                                                                                                                                                                                                                                                            | (32) 12.12.2013                                                                                                    | (31) 201462082425 P                                                                  |
| DU, Huifeng                                                                                                                                                                                                                                                                                    | (33) Germany                                                                                                       | (32) 20.11.2014                                                                      |
| FANG, Nicholas, X.                                                                                                                                                                                                                                                                             | (51) C12N 1/20                                                                                                     | (33) United States of America                                                        |
| VAN VLIET, Krysten, J.                                                                                                                                                                                                                                                                         | C12N 1/36                                                                                                          | (51) C12N 5/071                                                                      |
| (31) 201762504476 P                                                                                                                                                                                                                                                                            | C12P 7/18                                                                                                          | (11) EP3143127                                                                       |
| (32) 10.05.2017                                                                                                                                                                                                                                                                                | (11) EP3583221                                                                                                     | (21) EP15724442.7                                                                    |
| (33) United States of America                                                                                                                                                                                                                                                                  | (21) EP18704991.1                                                                                                  | (47) 14.07.2021                                                                      |
| (51) C12M 1/00                                                                                                                                                                                                                                                                                 | (47) 07.07.2021                                                                                                    | (87) US2015029636                                                                    |
| C12M 3/00                                                                                                                                                                                                                                                                                      | (87) EP2018054018                                                                                                  | 19.11.2015                                                                           |
| (11) EP3553161                                                                                                                                                                                                                                                                                 | 23.08.2018                                                                                                         | (22) 07.05.2015                                                                      |
| (21) EP19167880.4                                                                                                                                                                                                                                                                              | (22) 19.02.2018                                                                                                    | (54) USE OF SMALL MOLECULES TO ENHANCE MAFA EXPRESSION IN PANCREATIC ENDOCRINE CELLS |
| (47) 07.07.2021                                                                                                                                                                                                                                                                                | (54) MICROBIAL CONSORTIUM COMPRISING CLOSTRIDIA FOR 1,3-PROPANEDIOL PRODUCTION FROM GLYCEROL                       | (73) Janssen Biotech, Inc.                                                           |
| (22) 08.04.2019                                                                                                                                                                                                                                                                                | (73) Metabolic Explorer                                                                                            | (72) REZANIA, Alireza                                                                |
| (54) PHOTOBIOREACTOR WITH DEVICE FOR EMITTING ELECTROMAGNETIC RADIATION, DEVICE FOR EMITTING ELECTROMAGNETIC RADIATION AND METHOD FOR PREPARING OR CULTIVATING BIOLOGICAL MATERIAL, METHOD FOR PREPARING BIOLOGICAL MATERIAL AND/OR PRODUCING PHARMACEUTICALS, PARTICULARLY BIOPHARMACEUTICALS | (72) TOURRASSE, Olivier                                                                                            | (31) 201461994259 P                                                                  |
| (73) SCHOTT AG                                                                                                                                                                                                                                                                                 | RAYNAUD, Céline                                                                                                    | (32) 16.05.2014                                                                      |
| (72) OTT, Christian                                                                                                                                                                                                                                                                            | (31) 17305187                                                                                                      | (33) United States of America                                                        |
| HETTLER, Robert                                                                                                                                                                                                                                                                                | (32) 20.02.2017                                                                                                    | (51) C12N 5/0735                                                                     |
| (31) 102018108327                                                                                                                                                                                                                                                                              | (33) European Patent Office (EPO)                                                                                  | A61K 35/545                                                                          |
| (32) 09.04.2018                                                                                                                                                                                                                                                                                | (51) C12N 1/20                                                                                                     | C12Q 1/6883                                                                          |
| (33) Germany                                                                                                                                                                                                                                                                                   | C12R 1/01                                                                                                          | (11) EP3347487                                                                       |
| (51) C12M 1/14                                                                                                                                                                                                                                                                                 | A61K 35/745                                                                                                        | (21) EP16763789.1                                                                    |
| C12M 1/16                                                                                                                                                                                                                                                                                      | A23L 33/135                                                                                                        | (47) 14.07.2021                                                                      |
| C12M 1/18                                                                                                                                                                                                                                                                                      | A61K 8/99                                                                                                          | (87) EP2016071256                                                                    |
| B33Y 80/00                                                                                                                                                                                                                                                                                     | (11) EP3489350                                                                                                     | 16.03.2017                                                                           |
| (11) EP3452290                                                                                                                                                                                                                                                                                 | (21) EP17460068.4                                                                                                  | (22) 09.09.2016                                                                      |
| (21) EP17793249.8                                                                                                                                                                                                                                                                              | (47) 07.07.2021                                                                                                    | (54) NON-INVASIVE METHODS FOR ASSESSING GENETIC INTEGRITY OF PLURIPOTENT STEM CELLS  |
| (47) 14.07.2021                                                                                                                                                                                                                                                                                | (22) 27.11.2017                                                                                                    | (73) INSERM (Institut National de la Santé et de la Recherche Médicale)              |
| (87) US2017030833                                                                                                                                                                                                                                                                              | (54) BIFIDOBACTERIUM ANIMALIS AMT30 STRAIN AND COMPOSITION CONTAINING THE STRAIN OF BIFIDOBACTERIUM ANIMALIS AMT30 | Université de Montpellier                                                            |
| 09.11.2017                                                                                                                                                                                                                                                                                     | (73) Sosnowska-Turek, Ewelina                                                                                      | Centre Hospitalier Universitaire de Montpellier                                      |
| (22) 03.05.2017                                                                                                                                                                                                                                                                                | (72) Sosnowska-Turek, Ewelina                                                                                      | (72) DE VOS, John                                                                    |
| (54) THREE-DIMENSIONAL BIOREACTOR FOR CELL EXPANSION AND RELATED APPLICATIONS                                                                                                                                                                                                                  | Turek Jaroslaw, Piotr                                                                                              | ASSOU, Said                                                                          |
| (73) SOUTHWEST RESEARCH INSTITUTE                                                                                                                                                                                                                                                              | (51) C12N 1/38                                                                                                     | GIRAULT, Nicolas                                                                     |
| (72) LING, Jian                                                                                                                                                                                                                                                                                | A01N 63/20                                                                                                         | (31) 15306389                                                                        |
| HARRIS, Jeffrey N.                                                                                                                                                                                                                                                                             | (11) EP3035802                                                                                                     | (32) 11.09.2015                                                                      |
| RUBAL, Michael J.                                                                                                                                                                                                                                                                              | (21) EP14758511.1                                                                                                  | (33) European Patent Office (EPO)                                                    |
| (31) 201662332177 P                                                                                                                                                                                                                                                                            | (47) 07.07.2021                                                                                                    | (51) C12N 5/0775                                                                     |
| (32) 05.05.2016                                                                                                                                                                                                                                                                                | (87) EP2014067418                                                                                                  | C12N 5/0784                                                                          |
|                                                                                                                                                                                                                                                                                                | 26.02.2015                                                                                                         | (11) EP3224348                                                                       |
|                                                                                                                                                                                                                                                                                                | (22) 14.08.2014                                                                                                    | (21) EP15805415.5                                                                    |
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| (87) EP2015077760                                      | LU, Bingxin                           | 14.01.2015                          |
| 02.06.2016                                             | WANG, Qiong                           | 21.04.2015                          |
| (22) 26.11.2015                                        | PENG, Lin                             | 10.06.2015                          |
| (54) SECRETOMES AND METHOD FOR<br>PRODUCING SECRETOMES | LU, Jian                              | 10.06.2015                          |
| (73) Med Cell Bahamas Ltd.                             | GU, Zhenghua                          | 24.06.2015                          |
| (72) KELLNER, Steven James                             | SHI, Guiyang                          | 25.06.2015                          |
| (31) PCT/EP2014/075875                                 | (31) 201610507284                     | 16.11.2015                          |
| 956152015                                              | (32) 30.06.2016                       | 16.11.2015                          |
| (32) 27.11.2014                                        | (33) China                            | (33) United States of America       |
| 02.07.2015                                             | (51) C12N 9/00                        | United States of America            |
| (33) World Intellectual Property Office (WIPO)         | C12N 9/12                             | United States of America            |
| Switzerland                                            | C12N 15/52                            | United States of America            |
| (51) C12N 5/10                                         | C12N 15/63                            | United States of America            |
| C12N 9/88                                              | C12N 15/74                            | United States of America            |
| C12N 15/60                                             | (11) EP3625336                        | United States of America            |
| C12N 15/82                                             | (21) EP18721939.9                     | United States of America            |
| C12P 5/00                                              | (47) 07.07.2021                       | United States of America            |
| C12P 7/26                                              | (87) DE2018000104                     | United States of America            |
| (11) EP3085778                                         | 22.11.2018                            | (51) C12N 9/16                      |
| (21) EP16171175.9                                      | (22) 13.04.2018                       | C12N 15/63                          |
| (47) 07.07.2021                                        | (54) PYRUVATE CARBOXYLASE AND         | (11) EP3222728                      |
| (22) 11.03.2014                                        | PYRUVATE CARBOXYLASE-                 | (21) EP15861198.8                   |
| (54) VALENCENE SYNTHASE                                | ENCODING DNA, PLASMID                 | (47) 14.07.2021                     |
| POLYPEPTIDES, ENCODING NUCLEIC                         | CONTAINING SAID DNA AND               | (87) KR2015012503                   |
| ACID MOLECULES AND USES                                | MICROORGANISM FOR THE                 | 26.05.2016                          |
| THEREOF                                                | PRODUCTION THEREOF,                   | (22) 19.11.2015                     |
| (73) Evolva, Inc.                                      | AND METHODS FOR THE                   | (54) METHOD FOR REGULATING GENE     |
| (72) SARAN, Dayal                                      | PRODUCTION OF PRODUCTS THE            | EXPRESSION USING CAS9 PROTEIN       |
| PARK, Grace Eunyoung                                   | BIOSYNTHESIS OF WHICH INCLUDES        | EXPRESSED FROM TWO VECTORS          |
| (31) 201361852462 P                                    | OXALOACETATE AS PRECURSOR,            | (73) Institute for Basic Science    |
| (32) 14.03.2013                                        | AND CHROMOSOME                        | (72) KIM, Jin Soo                   |
| (33) United States of America                          | (73) Forschungszentrum Jülich GmbH    | KOO, Tae Young                      |
| (51) C12N 7/02                                         | (72) KORTMANN, Maïke                  | (31) 20140161809                    |
| C12N 15/86                                             | BAUMGART, Meike                       | (32) 19.11.2014                     |
| (11) EP3246399                                         | BOTT, Michael                         | (33) Korea (Republic)               |
| (21) EP17163152.6                                      | (31) 102017004751                     | (51) C12N 9/22                      |
| (47) 07.07.2021                                        | (32) 18.05.2017                       | C12N 9/96                           |
| (22) 12.12.2003                                        | (33) Germany                          | C12Q 1/6806                         |
| (54) ALPHAVIRUS PARTICLES AND                          | (51) C12N 9/10                        | (11) EP2951314                      |
| METHODS FOR PREPARATION                                | C12N 15/52                            | (21) EP14701765.1                   |
| (73) Alphavax, Inc.                                    | C12N 15/70                            | (47) 07.07.2021                     |
| (72) SMITH, Jonathan, F.                               | C12P 13/10                            | (87) EP2014051743                   |
| KAMRUD, Kurt                                           | C12R 1/01                             | 07.08.2014                          |
| DRYGA, Sergey                                          | C12R 1/19                             | (22) 29.01.2014                     |
| ALTERSON, Harold                                       | (11) EP3227440                        | (54) SOLID MEDIUM FOR THE STORAGE   |
| RAYNER, Jon                                            | (21) EP15816329.5                     | OF BIOLOGICAL MATERIAL              |
| ALTERSON, Kim                                          | (47) 14.07.2021                       | (73) Global Life Sciences Solutions |
| MAUGHAN, Maureen, F.                                   | (87) US2015064140                     | Operations UK Ltd                   |
| (31) 433058 P                                          | 09.06.2016                            | (72) JAMES, Martin, David           |
| (32) 13.12.2002                                        | (22) 04.12.2015                       | HORTON, Jeffrey, Kenneth            |
| (33) United States of America                          | (54) BACTERIA ENGINEERED TO TREAT     | TATNELL, Peter, James               |
| (51) C12N 9/00                                         | DISEASES ASSOCIATED WITH              | (31) 201301618                      |
| C12N 9/02                                              | HYPERAMMONEMIA                        | 201313798483                        |
| C12P 1/02                                              | (73) Synlogic Operating Company, Inc. | (32) 30.01.2013                     |
| C12P 21/02                                             | (72) FALB, Dean                       | 13.03.2013                          |
| C12P 39/00                                             | ISABELLA, Vincent, M.                 | (33) United Kingdom                 |
| C12R 1/645                                             | KOTULA, Jonathan, W.                  | United States of America            |
| (11) EP3263711                                         | MILLER, Paul, F.                      | (51) C12N 9/22                      |
| (21) EP17177398.9                                      | (31) 201462087854 P                   | C12N 9/96                           |
| (47) 07.07.2021                                        | 201562103513 P                        | C12Q 1/6855                         |
| (22) 22.06.2017                                        | 201562150508 P                        | (11) EP3234192                      |
| (54) A METHOD FOR IMPROVING                            | 201562173710 P                        | (21) EP15831020.1                   |
| MICROBIAL LACCASE PRODUCTION                           | 201562173706 P                        | (47) 14.07.2021                     |
| (73) Jiangnan University                               | 201562183935 P                        | (87) US2015067138                   |
| (72) DING, Zhongyang                                   | 201562184811 P                        | 23.06.2016                          |
| GUO, Chaolin                                           | 201562256039 P                        | (22) 21.12.2015                     |
| ZHAO, Liting                                           | 201562256041 P                        | (54) UNBIASED IDENTIFICATION OF     |
|                                                        | (32) 05.12.2014                       | DOUBLE-STRAND BREAKS AND            |
|                                                        |                                       | GENOMIC REARRANGEMENT BY            |



|                                       |                                 |                                                |
|---------------------------------------|---------------------------------|------------------------------------------------|
| GENOME-WIDE INSERT CAPTURE SEQUENCING | GOURGUECHON, Stephane, B.       | 201161483116 P                                 |
| (73) The Broad Institute, Inc.        | (31) 201462094980 P             | 201161546602 P                                 |
| Massachusetts Institute of Technology | 201562198097 P                  | (32) 26.01.2011                                |
| (72) ZHANG, Feng                      | (32) 20.12.2014                 | 06.05.2011                                     |
| YAN, Winston                          | 28.07.2015                      | 13.10.2011                                     |
| SCOTT, David                          | (33) United States of America   | (33) European Patent Office (EPO)              |
| SMARGON, Aaron                        | United States of America        | United States of America                       |
| MIRZAZADEH, Reza                      | (51) C12N 9/28                  | United States of America                       |
| CROSETTO, Nicola                      | (11) EP3294882                  | (51) C12N 9/52                                 |
| (31) 201462094903 P                   | (21) EP16721795.9               | C12N 9/54                                      |
| (32) 19.12.2014                       | (47) 07.07.2021                 | (11) EP3583210                                 |
| (33) United States of America         | (87) EP2016060267               | (21) EP18711793.2                              |
|                                       | 17.11.2016                      | (47) 07.07.2021                                |
| (51) C12N 9/22                        | (22) 09.05.2016                 | (87) US2018021440                              |
| C12N 15/63                            | (54) ALPHA-AMYLASE VARIANTS AND | 20.09.2018                                     |
| C12N 5/0783                           | POLYNUCLEOTIDES ENCODING        | (22) 08.03.2018                                |
| (11) EP3004339                        | SAME                            | (54) TRYPSIN-LIKE SERINE PROTEASES             |
| (21) EP14730473.7                     | (73) Novozymes A/S              | AND USES THEREOF                               |
| (47) 07.07.2021                       | (72) ANDERSEN, Carsten          | (73) Danisco US Inc.                           |
| (87) EP2014061181                     | SRIVASTAVA, Vivek               | (72) SHIPOVSKOV, Stepan                        |
| 04.12.2014                            | BALUMURI, Padmavathi            | ZOU, Zhengzheng                                |
| (22) 28.05.2014                       | CHAKRABARTI, Partha, Pratim     | YU, Shukun                                     |
| (54) NEW COMPACT SCAFFOLD OF CAS9     | DALAL, Sohel                    | GU, Xiaogang                                   |
| IN THE TYPE II CRISPR SYSTEM          | (31) 2336CH2015                 | (31) PCT/CN2017/076749                         |
| (73) Collectis                        | (32) 08.05.2015                 | (32) 15.03.2017                                |
| (72) DUCHATEAU, Philippe              | (33) India                      | (33) World Intellectual Property Office (WIPO) |
| BERTONATI, Claudia                    | (51) C12N 9/34                  | (51) C12N 9/88                                 |
| (31) 201370297                        | C12P 19/02                      | (11) EP3458584                                 |
| 201370771                             | C12P 19/20                      | (21) EP17726229.2                              |
| (32) 29.05.2013                       | (11) EP3362574                  | (47) 07.07.2021                                |
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| (33) Denmark                          | (47) 07.07.2021                 | 23.11.2017                                     |
| Denmark                               | (87) US2016056549               | (22) 17.05.2017                                |
| (51) C12N 9/22                        | 20.04.2017                      | (54) FUSION PROTEINS COMPRISING AN             |
| C12N 15/85                            | (22) 12.10.2016                 | ALDOLASE ENZYME JOINED TO A                    |
| (11) EP3456831                        | (54) GLUCOAMYLASE VARIANTS AND  | MALTOSE BINDING PROTEIN                        |
| (21) EP18187581.6                     | POLYNUCLEOTIDES ENCODING        | (73) Consejo Superior De Investigaciones       |
| (47) 14.07.2021                       | SAME                            | Científicas                                    |
| (22) 16.04.2014                       | (73) Novozymes A/S              | Technical University of Darmstadt              |
| (54) TARGETED MODIFICATION OF RAT     | (72) NELSON, Beth               | Sustainable Momentum, S.L.                     |
| GENOME                                | SVENDSEN, Allan                 | (72) CLAPÉS SABORIT, Pedro                     |
| (73) Regeneron Pharmaceuticals, Inc.  | SRIVASTAVA, Vivek               | HERNÁNDEZ SÁNCHEZ, Karel                       |
| (72) LEE, Jeffrey                     | MALTEN, Marco                   | JOGLAR TAMARGO, Jesús                          |
| MUJICA, Alexander                     | POULSEN, Thomas A.              | BUJONS VILÁS, Jordi                            |
| AUERBACH, Wojtek                      | RAMAIIYA, Preethi               | FESSNER, Wolf-Dieter                           |
| LAI, Ka-Man Venus                     | GUPTA, Shikha                   | DOMÍNGUEZ DE MARÍA, Pablo                      |
| VALENZUELA, David                     | RAO, Vasudeva P.                | (31) 16382218                                  |
| YANCOPOULOS, George                   | BALUMURI, Padmavathi            | (32) 18.05.2016                                |
| (31) 201361812319 P                   | (31) 5489CH2015                 | (33) European Patent Office (EPO)              |
| 201361914768 P                        | 5490CH2015                      | (51) C12N 15/10                                |
| (32) 16.04.2013                       | (32) 14.10.2015                 | C12N 15/11                                     |
| 11.12.2013                            | 14.10.2015                      | C12Q 1/6806                                    |
| (33) United States of America         | (33) India                      | (11) EP3514244                                 |
| United States of America              | India                           | (21) EP18214114.3                              |
| (51) C12N 9/22                        | (51) C12N 9/42                  | (47) 07.07.2021                                |
| C12Q 1/6806                           | (11) EP3235903                  | (22) 01.04.2010                                |
| (11) EP3234200                        | (21) EP17167880.8               | (54) NUCLEIC ACID PREPARATION                  |
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| F28F 1/00                         | (54) MICROTREATMENT AND                   | (33) Japan                           |
| F28F 9/02                         | MICROSTRUCTURE OF CARBIDE                 | (51) C21D 8/02                       |
| (11) EP2951324                    | CONTAINING IRON-BASED ALLOY               | C21D 9/46                            |
| (21) EP14710072.1                 | (73) Cola, Gary M. Jr.                    | C22C 38/00                           |
| (47) 07.07.2021                   | (72) Cola, Gary M. Jr.                    | C22C 38/02                           |
| (87) US2014014482                 | (31) 201261651992 P                       | C22C 38/04                           |
| 07.08.2014                        | (32) 25.05.2012                           | C22C 38/06                           |
| (22) 03.02.2014                   | (33) United States of America             | C22C 38/10                           |
| (54) STAVE WITH EXTERNAL MANIFOLD | (51) C21D 1/22                            | C22C 38/12                           |
| (73) Berry Metal Company          | C21D 1/25                                 | C22C 38/14                           |
| (72) SMITH, Todd, G.              | C21D 1/673                                | C22C 38/16                           |
| (31) 201361760025 P               | C21D 8/04                                 | C22C 38/20                           |
| (32) 01.02.2013                   | (11) EP3502283                            | C22C 38/38                           |
| (33) United States of America     | (21) EP18205582.2                         | C22C 38/60                           |
| (51) C21C 7/10                    | (47) 14.07.2021                           | C23G 1/00                            |
| C22C 19/05                        | (22) 12.11.2018                           | C23G 1/08                            |

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| (11) EP3399064                   | C21D 9/46                              | (31) 201710530305                      |
| (21) EP17753208.2                | C22C 38/00                             | (32) 29.06.2017                        |
| (47) 14.07.2021                  | C22C 38/02                             | (33) China                             |
| (87) JP2017005466                | C22C 38/04                             | (51) C22C 5/04                         |
| 24.08.2017                       | C22C 38/06                             | (11) EP3444364                         |
| (22) 15.02.2017                  | C22C 38/08                             | (21) EP17186552.0                      |
| (54) HIGH-STRENGTH COLD-ROLLED   | C22C 38/16                             | (47) 14.07.2021                        |
| STEEL SHEET                      | C22C 38/34                             | (22) 17.08.2017                        |
| (73) JFE Steel Corporation       | C22C 38/38                             | (54) PLATINIUM BASED ALLOY, USE        |
| (72) YOSHIOKA Shimpei            | C22C 38/60                             | THEREOF                                |
| ONO Yoshihiko                    | H01F 1/147                             | (73) Richemont International S.A.      |
| MASUOKA Hiroyuki                 | H01F 1/16                              | (72) LALIRE, Fanny                     |
| (31) 2016028880                  | (11) EP3594371                         | POMMIER, Stéphane                      |
| (32) 18.02.2016                  | (21) EP18764795.3                      | DIOLOGENT, Frédéric                    |
| (33) Japan                       | (47) 07.07.2021                        | TROSCH, Tanja                          |
| (51) C21D 8/02                   | (87) JP2018008780                      | GLATZEL, Uwe                           |
| C21D 9/56                        | 13.09.2018                             | VÖLKL, Rainer                          |
| C22C 38/00                       | (22) 07.03.2018                        | (51) C22C 5/04                         |
| C22C 38/02                       | (54) NON-ORIENTED ELECTRICAL           | H01T 13/39                             |
| C22C 38/04                       | STEEL SHEET AND METHOD FOR             | (11) EP2581999                         |
| C22C 38/06                       | MANUFACTURING NON-ORIENTED             | (21) EP11792064.5                      |
| C22C 38/34                       | ELECTRICAL STEEL SHEET                 | (47) 14.07.2021                        |
| C22C 38/38                       | (73) Nippon Steel Corporation          | (87) JP2011000612                      |
| (11) EP3517636                   | (72) FUJIMURA Hiroshi                  | 15.12.2011                             |
| (21) EP17853506.8                | ICHIE Takeru                           | (22) 03.02.2011                        |
| (47) 14.07.2021                  | NATORI Yoshiaki                        | (54) SPARK PLUG                        |
| (87) KR2017010639                | YASHIKI Hiroyoshi                      | (73) NGK SPARK PLUG CO., LTD.          |
| 29.03.2018                       | (31) 2017042547                        | (72) SUMOYAMA, Daisuke                 |
| (22) 26.09.2017                  | (32) 07.03.2017                        | SHIBATA, Tsutomu                       |
| (54) COLD-ROLLED STEEL PLATE FOR | (33) Japan                             | TANAKA, Tomo-o                         |
| HOT FORMING, HAVING EXCELLENT    | (51) C22B 7/00                         | (31) 2010134045                        |
| CORROSION-RESISTANCE AND         | C22B 11/02                             | (32) 11.06.2010                        |
| SPOT-WELDABILITY, HOT-FORMED     | (11) EP3583235                         | (33) Japan                             |
| MEMBER, AND METHOD FOR           | (21) EP18712738.6                      | (51) C22C 9/00                         |
| MANUFACTURING SAME               | (47) 14.07.2021                        | C22F 1/08                              |
| (73) Posco                       | (87) US2018018673                      | H01B 1/02                              |
| (72) OH, Jin-Keun                | 23.08.2018                             | H01L 23/49                             |
| CHO, Yeol-Rae                    | (22) 20.02.2018                        | (11) EP3167482                         |
| CHO, A-Ra                        | (54) PROCESS FOR THE INCINERATION      | (21) EP15721617.7                      |
| CHA, Jin-Ho                      | OF ACTIVATED COAL-SUPPORTED            | (47) 14.07.2021                        |
| HEO, Si-Myoung                   | PGM CATALYSTS                          | (87) EP2015059183                      |
| SEO, Jeong-Won                   | (73) Heraeus Deutschland GmbH & Co. KG | 14.01.2016                             |
| KIM, Seong-Woo                   | Heraeus Precious Metals North America  | (22) 28.04.2015                        |
| (31) 20160123273                 | LLC.                                   | (54) PROCESS FOR MANUFACTURING         |
| (32) 26.09.2016                  | (72) PETERS, Brian                     | OF A THICK COPPER WIRE FOR             |
| (33) Korea (Republic)            | HOBBS, Chris                           | BONDING APPLICATIONS                   |
| (51) C21D 8/02                   | ENGLAND, Todd                          | (73) Heraeus Deutschland GmbH & Co. KG |
| C22C 38/02                       | TAYLOR, Jimmy                          | (72) MILKE, Eugen                      |
| C22C 38/04                       | WINKLER, Holger                        | AINOUZ, Larbi                          |
| C22C 38/44                       | BAUER-SIEBENLIST, Bernhard             | PRENOSIL, Peter                        |
| C22C 38/46                       | (31) 201762460561 P                    | (31) 14176650                          |
| C22C 38/58                       | (32) 17.02.2017                        | (32) 11.07.2014                        |
| (11) EP3399067                   | (33) United States of America          | (33) European Patent Office (EPO)      |
| (21) EP16881911.8                | (51) C22C 1/02                         | (51) C22C 21/00                        |
| (47) 14.07.2021                  | C22C 1/03                              | B60L 50/64                             |
| (87) KR2016006963                | C22C 21/04                             | H01M 50/20                             |
| 06.07.2017                       | (11) EP3647440                         | H01M 50/50                             |
| (22) 29.06.2016                  | (21) EP18822966.0                      | H01M 50/502                            |
| (54) STEEL SHEET FOR TOOL AND    | (47) 14.07.2021                        | H01M 50/54                             |
| MANUFACTURING METHOD             | (87) CN2018084487                      | (11) EP3349269                         |
| THEREFOR                         | 03.01.2019                             | (21) EP17813466.4                      |
| (73) Posco                       | (22) 25.04.2018                        | (47) 14.07.2021                        |
| (72) PARK, Kyong Su              | (54) ALUMINUM ALLOY AND                | (87) KR2017002852                      |
| JANG, Jae Hoon                   | PREPARATION METHOD THEREFOR            | 21.12.2017                             |
| (31) 20150187113                 | (73) BYD Company Limited               | (22) 16.03.2017                        |
| (32) 28.12.2015                  | (72) GUO, Qiang                        | (54) BATTERY MODULE, AND BATTERY       |
| (33) Korea (Republic)            | XIE, Yongliang                         | PACK AND VEHICLE COMPRISING            |
| (51) C21D 8/12                   | LIAO, Mengjue                          | THE SAME                               |

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| (73) LG Chem, Ltd.               | (21) EP17721056.4                         | (33) France                        |
| (72) RYU, Jae-Uk                 | (47) 07.07.2021                           | (51) C23C 14/06                    |
| MUN, Jeong-O                     | (87) EP2017058918                         | C23C 14/32                         |
| LEE, Yoon-Koo                    | 26.10.2017                                | C23C 28/00                         |
| (31) 20160073360                 | (22) 13.04.2017                           | C23C 30/00                         |
| (32) 13.06.2016                  | (54) COMPONENT MADE OF PRESS-             | (11) EP3676420                     |
| (33) Korea (Republic)            | FORM-HARDENED, ALUMINUM-                  | (21) EP18768791.8                  |
| (51) C22C 21/02                  | BASED COATED STEEL SHEET, AND             | (47) 07.07.2021                    |
| C22C 21/04                       | METHOD FOR PRODUCING SUCH A               | (87) EP2018073339                  |
| C22F 1/043                       | COMPONENT                                 | 07.03.2019                         |
| B23K 26/32                       | (73) Salzgitter Flachstahl GmbH           | (22) 30.08.2018                    |
| (11) EP3555331                   | Volkswagen Aktiengesellschaft             | (54) A COATED CUTTING TOOL, METHOD |
| (21) EP17826268.9                | (72) KOLL, Thomas                         | FOR COATING THE CUTTING TOOL       |
| (47) 14.07.2021                  | DEBEAUX, Marc                             | AND USE OF COATED CUTTING TOOL     |
| (87) FR2017053531                | LUTHER, Friedrich                         | (73) Seco Tools AB                 |
| 28.06.2018                       | FRITZSCHE, Christian                      | (72) FALLQVIST, Mikael             |
| (22) 13.12.2017                  | MÜTZE, Stefan                             | ANDERSSON, Jon                     |
| (54) ALUMINIUM ALLOY FOR LASER   | BEIER, Frank                              | (31) 17188637                      |
| WELDING WITHOUT FILLER WIRE      | GRAUL, Matthias                           | (32) 30.08.2017                    |
| (73) Constellium Neuf-Brisach    | HARTMANN, Haucke-Frederik                 | (33) European Patent Office (EPO)  |
| (72) MASSE, Jean-Philippe        | LASS, Jan-Frederik                        | (51) C23C 14/34                    |
| CERVI, Laurent                   | (31) 102016010715                         | H01J 37/32                         |
| KEMPA, Stefan                    | (32) 18.04.2016                           | H01J 37/34                         |
| (31) 1662751                     | (33) Germany                              | (11) EP3449496                     |
| (32) 19.12.2016                  | (51) C23C 4/18                            | (21) EP17790063.6                  |
| (33) France                      | C23C 14/58                                | (47) 07.07.2021                    |
| (51) C22C 23/06                  | C23C 18/12                                | (87) US2017024749                  |
| C22F 1/06                        | C23C 24/08                                | 02.11.2017                         |
| E21B 34/00                       | C23C 30/00                                | (22) 29.03.2017                    |
| (11) EP3568501                   | F01D 5/28                                 | (54) PROCESS KIT FOR A PLASMA      |
| (21) EP18700246.4                | (11) EP3663432                            | PROCESSING CHAMBER                 |
| (47) 14.07.2021                  | (21) EP19213144.9                         | (73) Applied Materials, Inc.       |
| (87) GB2018050038                | (47) 14.07.2021                           | (72) COX, Michael S.               |
| 19.07.2018                       | (22) 03.12.2019                           | HAWRYLCHAK, Lara                   |
| (22) 09.01.2018                  | (54) COATING SYSTEMS INCLUDING            | WEST, Brian T.                     |
| (54) CORRODIBLE DOWNHOLE ARTICLE | INFILTRATION COATINGS AND                 | (31) 201662328426 P                |
| (73) Magnesium Elektron Limited  | REACTIVE PHASE SPRAY                      | 201715432590                       |
| (72) WILKS, Timothy              | FORMULATION COATINGS                      | (32) 27.04.2016                    |
| TURSKI, Mark                     | (73) General Electric Company             | 14.02.2017                         |
| MURPHY, Matthew                  | (72) KESHAVAN, Hrishikesh                 | (33) United States of America      |
| (31) 201700714                   | BEWLAY, Bernard Patrick                   | United States of America           |
| (32) 16.01.2017                  | SANCHEZ, Jose                             | (51) C23C 14/35                    |
| (33) United Kingdom              | WALLACE, Margeaux                         | H01J 37/34                         |
| (51) C22C 27/04                  | PRITCHARD, Byron                          | (11) EP3619735                     |
| C22F 1/00                        | KULKARNI, Ambarish                        | (21) EP18729786.6                  |
| (11) EP2989225                   | (31) 201816208605                         | (47) 07.07.2021                    |
| (21) EP14787700.5                | (32) 04.12.2018                           | (87) US2018030778                  |
| (47) 07.07.2021                  | (33) United States of America             | 08.11.2018                         |
| (87) US2014033262                | (51) C23C 10/24                           | (22) 03.05.2018                    |
| 30.10.2014                       | H01M 4/04                                 | (54) SPUTTERING DEPOSITION SYSTEM  |
| (22) 08.04.2014                  | H01M 4/66                                 | WITH FLEXIBLE ADJUSTABLE           |
| (54) IMPROVED METAL ALLOYS FOR   | H01M 4/131                                | RETURN PATH MAGNET ASSEMBLY        |
| MEDICAL DEVICES                  | H01M 4/1391                               | (73) Cardinal CG Company           |
| (73) Icon Medical Corp.          | H01M 4/485                                | (72) HARTIG, Klaus, H.W.           |
| (72) PATEL, Udayan               | H01M 10/052                               | (31) 201762501277 P                |
| ROTH, Noah                       | (11) EP3629400                            | (32) 04.05.2017                    |
| (31) 201361816357 P              | (21) EP19200040.4                         | (33) United States of America      |
| (32) 26.04.2013                  | (47) 14.07.2021                           | (51) C23C 14/50                    |
| (33) United States of America    | (22) 27.09.2019                           | C23C 14/54                         |
| (51) C23C 2/12                   | (54) METHOD FOR PREPARING LITHIUM         | C23C 14/56                         |
| C23C 2/26                        | TRANSITION METAL OXIDES                   | C23C 16/458                        |
| C23C 2/28                        | (73) Commissariat à l'Energie Atomique et | C23C 16/46                         |
| C23C 2/40                        | aux Energies Alternatives                 | C23C 16/54                         |
| C23C 8/02                        | (72) GUERIN, Camille                      | H01L 21/67                         |
| C23C 8/10                        | GEBEL, Gérard                             | H01L 21/687                        |
| C23C 8/80                        | PICARD, Lionel                            | (11) EP3341961                     |
| C23C 28/00                       | (31) 1858942                              | (21) EP16753706.7                  |
| (11) EP3250727                   | (32) 28.09.2018                           | (47) 14.07.2021                    |

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| (87) IB2016054632<br>02.03.2017          | (73) DBS Group International Trust Company<br>S.r.l. | (33) United States of America |
| (22) 02.08.2016                          | (72) ALBANESE, Emanuele                              | (51) C25B 9/00                |
| (54) SUBSTRATE TREATMENT DEVICE          | (51) C23C 22/07                                      | (11) EP3464683                |
| (73) Meyer Burger (Germany) GmbH         | C23C 22/12                                           | (21) EP17803621.6             |
| (72) RASCHKE, Sebastian                  | C23C 22/18                                           | (47) 07.07.2021               |
| ANSORGE, Erik                            | C23C 22/20                                           | (87) US2017034554             |
| KEHR, Mirko                              | C23C 22/22                                           | 30.11.2017                    |
| BÖHM, Christian                          | C23C 22/33                                           | (22) 25.05.2017               |
| (31) 102015113962                        | C23C 22/74                                           | (54) ANODE ASSEMBLY, CONTACT  |
| (32) 24.08.2015                          | H01F 1/147                                           | STRIPS, ELECTROCHEMICAL       |
| (33) Germany                             | H01F 1/18                                            | CELL, AND METHODS TO USE AND  |
| (51) C23C 16/00                          | (11) EP3508614                                       | MANUFACTURE THEREOF           |
| H01J 37/32                               | (21) EP17846175.2                                    | (73) Calera Corporation       |
| B05B 16/00                               | (47) 14.07.2021                                      | (72) McWALD, Thomas, H.       |
| (11) EP3539676                           | (87) JP2017029699                                    | GILLIAM, Ryan, J.             |
| (21) EP17876726.5                        | 08.03.2018                                           | ZHAO, Hong                    |
| (47) 14.07.2021                          | (22) 21.08.2017                                      | KOSTOWSKYJ, Michael           |
| (87) CN2017081773                        | (54) COATED METAL, PROCESSING                        | (31) 201662341941 P           |
| 07.06.2018                               | LIQUID FOR COATING FORMATION                         | 201762442163 P                |
| (22) 25.04.2017                          | AND COATED METAL PRODUCTION                          | (32) 26.05.2016               |
| (54) PLASMA POLYMERIZATION COATING       | METHOD                                               | 04.01.2017                    |
| DEVICE                                   | (73) JFE Steel Corporation                           | (33) United States of America |
| (73) Jiangsu Favored Nanotechnology Co., | (72) TERASHIMA Takashi                               | United States of America      |
| Ltd.                                     | WATANABE Makoto                                      | (51) C25C 1/14                |
| (72) ZONG, Jian                          | TAKAMIYA Toshito                                     | C25C 1/18                     |
| (31) 201611076904                        | (31) 2016168256                                      | C25C 1/24                     |
| (32) 30.11.2016                          | (32) 30.08.2016                                      | C25C 7/02                     |
| (33) China                               | (33) Japan                                           | C25D 3/32                     |
| (51) C23C 16/30                          | (51) C23G 1/08                                       | C25D 3/36                     |
| C23C 16/452                              | C23G 3/02                                            | C25D 21/18                    |
| C23C 16/455                              | (11) EP3330408                                       | (11) EP3555345                |
| C30B 25/10                               | (21) EP17789026.6                                    | (21) EP17832256.6             |
| C30B 25/16                               | (47) 07.07.2021                                      | (47) 07.07.2021               |
| H01J 37/32                               | (87) JP2017006557                                    | (87) FR2017053680             |
| H01L 21/205                              | 02.11.2017                                           | 28.06.2018                    |
| (11) EP2396808                           | (22) 22.02.2017                                      | (22) 19.12.2017               |
| (21) EP10740987.2                        | (54) PICKLING DEVICE AND PAUSED                      | (54) ELECTROLYTIC METHOD      |
| (47) 07.07.2021                          | PICKLING OPERATION METHOD                            | FOR EXTRACTING TIN OR         |
| (87) IB2010000390                        | (73) Primetals Technologies Japan, Ltd.              | SIMULTANEOUSLY EXTRACTING     |
| 19.08.2010                               | (72) NAKATSUKA, Ryusuke                              | TIN AND LEAD CONTAINED IN     |
| (22) 10.02.2010                          | TSUJI, Kosei                                         | AN ELECTRICALLY CONDUCTIVE    |
| (54) MIGRATION AND PLASMA ENHANCED       | SUEMORI, Hideaki                                     | MIXTURE                       |
| CHEMICAL VAPOR DEPOSITION                | NAKAMURA, Koichi                                     | (73) Veolia environnement-VE  |
| (73) Butcher, Kenneth Scott Alexander    | (31) 2016089229                                      | (72) GEORGEAUD, Vincent       |
| (72) Butcher, Kenneth Scott Alexander    | (32) 27.04.2016                                      | DIAMAND, Auriane              |
| (31) 185953 P                            | (33) Japan                                           | LESCOURRET, Anne-Sophie       |
| 2653581                                  | (51) C25B 3/04                                       | (31) 1662775                  |
| (32) 10.06.2009                          | C25B 13/08                                           | (32) 19.12.2016               |
| 11.02.2009                               | (11) EP3453064                                       | (33) France                   |
| (33) United States of America            | (21) EP17793299.3                                    | (51) C25C 1/22                |
| Canada                                   | (47) 07.07.2021                                      | H01M 12/00                    |
| (51) C23C 18/16                          | (87) US2017030935                                    | H01M 8/10                     |
| C23C 18/18                               | 09.11.2017                                           | C25B 1/00                     |
| C23C 18/36                               | (22) 03.05.2017                                      | (11) EP3143184                |
| C23F 1/40                                | (54) REACTOR WITH ADVANCED                           | (21) EP15725462.4             |
| C23G 1/22                                | ARCHITECTURE FOR THE                                 | (47) 07.07.2021               |
| (11) EP3294926                           | ELECTROCHEMICAL REACTION OF                          | (87) US2015030286             |
| (21) EP15709985.4                        | CO <sub>2</sub> , CO, AND OTHER CHEMICAL             | 19.11.2015                    |
| (47) 14.07.2021                          | COMPOUNDS                                            | (22) 12.05.2015               |
| (87) IB2015000079                        | (73) Opus 12 Incorporated                            | (54) LANTHANIDE AND ACTINIDE  |
| 04.08.2016                               | The Regents of the University of                     | ELECTROCHEMISTRY              |
| (22) 27.01.2015                          | California                                           | (73) Leddy, Johna             |
| (54) PROCESS FOR SURFACE TREATING        | (72) KUHL, Kendra, P.                                | (72) LEDDY, Johna             |
| A MAGNESIUM ALLOY AND PROCESS            | CAVE, Etosha, R.                                     | KNOCH, Krysti L.              |
| FOR ELECTROLESS NICKEL PLATING           | LEONARD, George                                      | (31) 201461992112 P           |
| A TREATED SURFACE                        | (31) 201662331387 P                                  | (32) 12.05.2014               |
|                                          | (32) 03.05.2016                                      | (33) United States of America |
|                                          |                                                      | (51) C25C 3/12                |



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| D01D 5/08                                 | (21) EP17200630.6                           | C30B 29/20                      |
| D01F 1/10                                 | (47) 07.07.2021                             | H01L 21/36                      |
| D01F 9/17                                 | (22) 08.11.2017                             | (11) EP2754738                  |
| (11) EP2925918                            | (54) BARREL PLATING OR HIGH-SPEED           | (21) EP12830660.2               |
| (21) EP13854312.9                         | ROTARY PLATING USING A NEUTRAL              | (47) 07.07.2021                 |
| (47) 07.07.2021                           | TIN PLATING SOLUTION                        | (87) JP2012069975               |
| (87) IB2013059965                         | (73) Rohm and Haas Electronic Materials LLC | 14.03.2013                      |
| 22.05.2014                                | (72) KONDO, Makoto                          | (22) 06.08.2012                 |
| (22) 07.11.2013                           | MIZUNO, Yoko                                | (54) SCHOTTKY-BARRIER DIODE     |
| (54) THERMALLY REACTIVE                   | (31) 2016220435                             | (73) Tamura Corporation         |
| THERMOPLASTIC INTERMEDIATE                | (32) 11.11.2016                             | (72) SASAKI, Kohei              |
| PRODUCT AND METHOD OF                     | (33) Japan                                  | (31) 2011196429                 |
| MANUFACTURING THEREOF                     | (51) C30B 23/02                             | (32) 08.09.2011                 |
| (73) Stora Enso Oyj                       | C30B 23/06                                  | (33) Japan                      |
| (72) Garoff, Niklas                       | C30B 29/36                                  | (51) C40B 50/18                 |
| Areskog, Dimitri                          | (11) EP3450595                              | C12Q 1/6806                     |
| Gellerstedt, Göran                        | (21) EP17789663.6                           | C12Q 1/6869                     |
| Walter, Stephan                           | (47) 14.07.2021                             | (11) EP3277845                  |
| Manvi, Pavan Kumar                        | (87) JP2017016738                           | (21) EP16773777.4               |
| Seide, Gunnar                             | 02.11.2017                                  | (47) 07.07.2021                 |
| Gries, Thomas                             | (22) 27.04.2017                             | (87) US2016023899               |
| (31) 1251284                              | (54) VAPOUR-PHASE EPITAXIAL GROWTH          | 06.10.2016                      |
| (32) 13.11.2012                           | METHOD, AND METHOD FOR                      | (22) 24.03.2016                 |
| (33) Sweden                               | PRODUCING SUBSTRATE EQUIPPED                | (54) BEADS FOR NUCLEIC ACID     |
| (51) C25D 3/06                            | WITH EPITAXIAL LAYER                        | SEQUENCING                      |
| C25D 3/10                                 | (73) Kwansei Gakuin Educational Foundation  | (73) Genapsys Inc.              |
| C25D 5/04                                 | Toyota Tsusho Corporation                   | (72) LAU, Aldrich, N.K.         |
| C25D 5/08                                 | (72) KANEKO, Tadaaki                        | KENNEY, Paul, M.                |
| C25D 7/00                                 | KUTSUMA, Yasunori                           | PERSSON, Henrik                 |
| C25D 17/00                                | ASHIDA, Koji                                | (31) 201562140399 P             |
| C25D 17/10                                | HASHIMOTO, Ryo                              | 201562172647 P                  |
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| (47) 14.07.2021                           | (33) Japan                                  | (32) 30.03.2015                 |
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| 19.05.2016                                | C30B 29/46                                  | 23.07.2015                      |
| (22) 13.11.2015                           | C30B 29/60                                  | 15.10.2015                      |
| (54) PRODUCTION OF CHROMIUM LAYERS        | C30B 29/64                                  | (33) United States of America   |
| ON INTAGLIO PRINTING CYLINDERS            | H01L 21/02                                  | United States of America        |
| (73) Maschinenfabrik Kaspar Walter GmbH & | H01L 21/336                                 | United States of America        |
| Co. KG                                    | H01L 29/06                                  | United States of America        |
| Vopelius Chemie AG                        | H01L 29/12                                  | (51) D01D 4/02                  |
| (72) VON VOPELIUS, Thilo                  | H01L 29/16                                  | D01D 5/24                       |
| GSCHOSSMANN, Christoph                    | H01L 29/24                                  | D01D 5/247                      |
| (31) 102014116717                         | H01L 29/66                                  | (11) EP3204538                  |
| (32) 14.11.2014                           | H01L 29/778                                 | (21) EP15816643.9               |
| (33) Germany                              | H01L 29/78                                  | (47) 07.07.2021                 |
| (51) C25D 3/12                            | H01L 29/786                                 | (87) DE2015000498               |
| C25D 3/46                                 | H01L 51/00                                  | 14.04.2016                      |
| C25D 3/48                                 | H01L 51/05                                  | (22) 12.10.2015                 |
| C25D 3/50                                 | (11) EP3115484                              | (54) DEVICE FOR SPINNING HOLLOW |
| C25D 5/48                                 | (21) EP16155085.0                           | FIBER AND METHOD FOR SPINNING   |
| (11) EP3467153                            | (47) 07.07.2021                             | HOLLOW FIBER                    |
| (21) EP17810476.6                         | (22) 10.02.2016                             | (73) MainTech Systems GmbH      |
| (47) 07.07.2021                           | (54) DEVICE INCLUDING VERTICALLY            | (72) KRAUTWURST, Bernhard       |
| (87) KR2017004893                         | ALIGNED TWO-DIMENSIONAL                     | SCHAUPP, Hans-Joachim           |
| 14.12.2017                                | MATERIAL AND METHOD OF                      | (31) 102014014790               |
| (22) 11.05.2017                           | FORMING A VERTICALLY ALIGNED                | (32) 10.10.2014                 |
| (54) METHOD FOR CREATING HOLOGRAM         | TWO-DIMENSIONAL MATERIAL                    | (33) Germany                    |
| PATTERN                                   | (73) Samsung Electronics Co., Ltd.          | (51) D01D 5/06                  |
| (73) No, Seong-Tae                        | (72) YANG, Kiyeon                           | D01F 1/10                       |
| (72) No, Seong-Tae                        | LEE, Changseung                             | D01F 6/74                       |
| (31) 20160070389                          | KIM, Namjeong                               | (11) EP3225723                  |
| (32) 07.06.2016                           | KIM, Yeonhee                                | (21) EP17155538.6               |
| (33) Korea (Republic)                     | (31) 20150095361                            | (47) 07.07.2021                 |
| (51) C25D 3/32                            | (32) 03.07.2015                             | (22) 10.02.2017                 |
| C25D 17/16                                | (33) Korea (Republic)                       |                                 |

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| (54) POLYIMIDE FIBER AND METHOD FOR PRODUCING POLYIMIDE FIBER      | D06M 101/00                                                  | (32) 14.09.2012                                       |
| (73) I.S.T. Corporation                                            | D06M 101/34                                                  | (33) Germany                                          |
| (72) NAKAGAKI, Ryuta                                               | D06M 101/36                                                  | (51) D03C 3/20                                        |
| MORISHIMA, Katsuki                                                 | D06M 101/40                                                  | (11) EP3495537                                        |
| MORIUCHI, Koji                                                     | D03D 15/00                                                   | (21) EP19155127.4                                     |
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| (33) Japan                                                         | (47) 14.07.2021                                              | (54) SHED-FORMING DEVICE FOR A WEAVING MACHINE        |
| (51) D01D 5/06                                                     | (87) JP2014077148                                            | (73) Vandewiele NV                                    |
| D01F 2/08                                                          | 23.04.2015                                                   | (72) GRAHAM, James Anthony                            |
| D01F 2/10                                                          | (22) 10.10.2014                                              | THEOBALD, Matthew                                     |
| C01B 32/184                                                        | (54) COMMINGLED YARN, METHOD FOR PRODUCING SAME, AND TEXTILE | VANDERJEUPT, Bram                                     |
| C01B 32/194                                                        | (73) Mitsubishi Gas Chemical Company, Inc.                   | DE MEDTS, Frederik                                    |
| C01B 32/20                                                         | (72) NAKAI Asami                                             | (31) 201000748                                        |
| (11) EP3299499                                                     | OOTANI Akio                                                  | (32) 21.12.2010                                       |
| (21) EP16799199.1                                                  | KAJI Masataka                                                | (33) Belgium                                          |
| (47) 07.07.2021                                                    | TAKAGI Mitsuro                                               | (51) D03C 3/22                                        |
| (87) CN2016081120                                                  | MATSUMOTO Nobuhiko                                           | D03C 13/00                                            |
| 01.12.2016                                                         | MITADERA Jun                                                 | D03D 41/00                                            |
| (22) 05.05.2016                                                    | (31) 2013217035                                              | (11) EP3666945                                        |
| (54) MULTIFUNCTIONAL VISCOSE FIBRE AND PREPARATION METHOD THEREFOR | 2014189685                                                   | (21) EP18211841.4                                     |
| (73) Jinan Shengquan Group Share Holding Co., Ltd                  | (32) 18.10.2013                                              | (47) 07.07.2021                                       |
| (72) TANG, Yilin                                                   | 18.09.2014                                                   | (22) 12.12.2018                                       |
| ZHANG, Jinzhu                                                      | (33) Japan                                                   | (54) SHEDDING METHOD AND APPARATUS USING AIR PRESSURE |
| ZHENG, Yingfu                                                      | Japan                                                        | (73) Tape Weaving Sweden AB                           |
| ZHANG, Shuyun                                                      | (51) D01G 25/00                                              | (72) BLYCKER, Henrik                                  |
| LIU, Xiaomin                                                       | (11) EP3052681                                               | (51) D03C 3/36                                        |
| XU, Ripeng                                                         | (21) EP14723330.8                                            | (11) EP3440247                                        |
| (31) 201510267761                                                  | (47) 07.07.2021                                              | (21) EP17722875.6                                     |
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| (33) China                                                         | 09.04.2015                                                   | (87) IB2017052049                                     |
| (51) D01D 10/02                                                    | (22) 07.05.2014                                              | 12.10.2017                                            |
| D01D 10/04                                                         | (54) LAP MACHINE AND METHOD FOR PRODUCING A LAP FROM SLIVERS | (22) 10.04.2017                                       |
| D06B 3/04                                                          | (73) Trützschler GmbH & Co. KG                               | (54) SHED-FORMING MODULE FOR A WEAVING DEVICE         |
| D06B 15/09                                                         | (72) SAEGER, Nicole                                          | (73) Vandewiele NV                                    |
| F26B 5/02                                                          | FRIEDRICH, Roland                                            | (72) VANDERJEUPT, Bram                                |
| F26B 13/00                                                         | (31) 102013110914                                            | THEOBALD, Matthew                                     |
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| (22) 24.07.2015                                                    | (47) 07.07.2021                                              | (11) EP3440248                                        |
| (54) ACOUSTIC-ASSISTED HEAT AND MASS TRANSFER DEVICE               | (22) 25.04.2019                                              | (21) EP17723158.6                                     |
| (73) Heat Technologies, Inc.                                       | (54) METHOD AND DEVICE FOR PROCESSING FIBRES                 | (47) 14.07.2021                                       |
| (72) PLAVNIK, Zinovy Z.                                            | (73) Trützschler GmbH & Co. KG                               | (87) IB2017052050                                     |
| LYE, Jason                                                         | (72) Gries, Thomas                                           | 12.10.2017                                            |
| (31) 201462028656 P                                                | Cloppenburg, Frederik                                        | (22) 10.04.2017                                       |
| (32) 24.07.2014                                                    | Kins, Ruben                                                  | (54) JACQUARD MACHINE WITH INNOVATIVE DRIVE SYSTEM    |
| (33) United States of America                                      | (31) 102018110449                                            | (73) Vandewiele NV                                    |
| (51) D01F 6/60                                                     | (32) 02.05.2018                                              | (72) VANDERJEUPT, Bram                                |
| D02G 3/04                                                          | (33) Germany                                                 | THEOBALD, Matthew                                     |
| D02G 3/16                                                          | (51) D01H 1/115                                              | (31) 165243                                           |
| D02G 3/36                                                          | D01H 5/28                                                    | (32) 08.04.2016                                       |
| D02G 3/40                                                          | (11) EP2895647                                               | (33) Belgium                                          |
| D03D 1/00                                                          | (21) EP13803202.4                                            | (51) D03D 1/00                                        |
| D04B 1/14                                                          | (47) 14.07.2021                                              | D03D 11/00                                            |
| D04B 21/00                                                         | (87) IB2013001963                                            | D03D 25/00                                            |
| D04C 1/02                                                          | 20.03.2014                                                   | D03D 15/267                                           |
| D06M 13/513                                                        | (22) 10.09.2013                                              | D03D 15/275                                           |
| D06M 15/55                                                         | (54) SPINNING STATION OF A ROVING MACHINE                    | (11) EP3676431                                        |
| D06M 15/564                                                        | (73) Maschinenfabrik Rieter AG                               | (21) EP18773796.0                                     |
| D06M 15/59                                                         | (72) BLANKENHORN, Peter                                      | (47) 14.07.2021                                       |
|                                                                    | (31) 102012108613                                            |                                                       |

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| (87) FR2018052117<br>07.03.2019                              | (22) 25.10.2019                                                  | BATTERY SEPARATOR AND<br>LITHIUM ION SECONDARY BATTERY<br>SEPARATOR                             |
| (22) 29.08.2018                                              | (54) AIR JET LOOM WITH AIR TUCK-IN<br>DEVICE                     | (73) Mitsubishi Paper Mills Limited                                                             |
| (54) WOVEN FIBROUS STRUCTURE FOR<br>FORMING A CASING PREFORM | (73) Tsudakoma Kogyo Kabushiki Kaisha                            | (72) SATO, Tomohiro                                                                             |
| (73) Safran Aircraft Engines                                 | (72) TAMURA, Koichi                                              | SHIGEMATSU, Toshihiro                                                                           |
| (72) LE HONG, Son                                            | MYOGI, Keiichi                                                   | KATO, Makoto                                                                                    |
| COUPE, Dominique Marie Christian                             | (31) 2018209408                                                  | HYODO, Kenji                                                                                    |
| GABILLON, Martin                                             | (32) 07.11.2018                                                  | AIZAWA, Wakana                                                                                  |
| GRELIN, Hervé                                                | (33) Japan                                                       | (31) 2013020308                                                                                 |
| MAHIEU, Jean-Noël                                            | (51) D04B 15/56                                                  | 2013262265                                                                                      |
| MOUSILLAT, Sylvain                                           | (11) EP3705613                                                   | 2013263275                                                                                      |
| MORTIER, Roland José Yann                                    | (21) EP19160527.8                                                | (32) 05.02.2013                                                                                 |
| RAYMOND, Frédéric                                            | (47) 14.07.2021                                                  | 19.12.2013                                                                                      |
| (31) 1757977                                                 | (22) 04.03.2019                                                  | 20.12.2013                                                                                      |
| (32) 30.08.2017                                              | (54) FLAT KNITTING MACHINE YARN                                  | (33) Japan                                                                                      |
| (33) France                                                  | FEEDER WITH VARIABLE YARN                                        | Japan                                                                                           |
| (51) D03D 15/513                                             | FEEDING POSITIONS                                                | Japan                                                                                           |
| (11) EP3385418                                               | (73) Pai Lung Machinery Mill Co., Ltd.                           | (51) D05C 17/02                                                                                 |
| (21) EP16870416.1                                            | (72) LEE, Chih-Chiang                                            | D06N 7/00                                                                                       |
| (47) 14.07.2021                                              | CHENG, Yuo-Po                                                    | (11) EP3543397                                                                                  |
| (87) JP2016083562                                            | (51) D04B 21/14                                                  | (21) EP18174728.8                                                                               |
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| (22) 11.11.2016                                              | D04B 21/18                                                       | (22) 29.05.2018                                                                                 |
| (54) FABRIC AND PROTECTIVE PRODUCT                           | (11) EP3508630                                                   | (54) METHOD FOR MANUFACTURING A<br>CARPET OR A RUG                                              |
| (73) Teijin Limited                                          | (21) EP17845417.9                                                | (73) Aladdin Manufacturing Corporation                                                          |
| (72) SHIMADA, Hiroki                                         | (47) 14.07.2021                                                  | (72) REYNOLDS, Charles Winston                                                                  |
| IWASHITA, Kenji                                              | (87) CN2017099560                                                | DYE, Mark Gregory                                                                               |
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| (22) 10.04.2017                                              | (32) 31.08.2016                                                  | (54) DEVICE FOR TREATING STRAND-<br>SHAPED TEXTILE PRODUCTS IN THE<br>FORM OF A ROTATING STRAND |
| (54) WOVEN FABRIC AND METHOD OF<br>PRODUCTION THEREOF        | 31.08.2016                                                       | (73) Fong's Europe GmbH                                                                         |
| (73) Calik Denim Tekstil San. Ve Tic. A.S.                   | (33) China                                                       | (72) SCHMITZ, Johannes                                                                          |
| (72) YENICI, Hamit                                           | China                                                            | (31) 102017113001                                                                               |
| KARADUMAN, Ahmet Serhat                                      | (51) D04C 7/00                                                   | (32) 13.06.2017                                                                                 |
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| KAYA, Kemal                                                  | (21) EP19168437.2                                                | (51) D06C 13/04                                                                                 |
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| (32) 11.04.2016                                              | (54) BRAIDING MACHINE                                            | (11) EP3553225                                                                                  |
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| (51) D03D 47/30                                              | Spin Master Ltd.                                                 | (47) 07.07.2021                                                                                 |
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| (47) 07.07.2021                                              | Chan, Herman                                                     | (73) APT Asia pacific Pty. Ltd.                                                                 |
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| (54) SUB-NOZZLE FOR AIR JET LOOM                             | 201815863533                                                     | (72) SICK, Stephan                                                                              |
| (73) Tsudakoma Kogyo Kabushiki Kaisha                        | (32) 09.05.2017                                                  | JANSEN, Bernd                                                                                   |
| (72) YONEJIMA, Yoshiyuki                                     | 05.01.2018                                                       | SCHMITZ, Dirk                                                                                   |
| KOBORI, Yuichiro                                             | (33) United Kingdom                                              | LOHR, Ivo                                                                                       |
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| (47) 14.07.2021                                              | (54) NON-WOVEN FABRIC BASE MATERIAL<br>FOR LITHIUM ION SECONDARY |                                                                                                 |

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| (87) KR2017014805                    | HOLLENHORST, Heinrich               | (73) Electrolux Appliances Aktiebolag      |
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| (22) 15.12.2017                      | (31) 102018119621                   | Viero, Massimo                             |
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| (72) KO, Gi Hoon                     | (51) D06F 37/06                     | 13182331                                   |
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| (32) 20.02.2017                      | (22) 06.11.2019                     | European Patent Office (EPO)               |
| (33) Korea (Republic)                | (54) A METHOD OF OPERATION FOR A    | (51) D06F 57/12                            |
| (51) D06F 25/00                      | WASHING MACHINE                     | (11) EP3406790                             |
| D06F 39/08                           | (73) Miele & Cie. KG                | (21) EP18173401.3                          |
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| (21) EP16204630.4                    | Zielke, Marcel                      | AND HOUSEHOLD APPLIANCES                   |
| (47) 07.07.2021                      | (31) 102018130256                   | CONTAINING SAID BOILER                     |
| (22) 04.04.2013                      | (32) 29.11.2018                     | (73) POLTI S.p.A.                          |
| (54) LAUNDRY TREATING MACHINE        | (33) Germany                        | (72) POLTI, Francesca                      |
| (73) LG ELECTRONICS INC.             | (51) D06F 37/26                     | (31) 201700055276                          |
| (72) DOH, Younjin                    | (11) EP2949805                      | (32) 22.05.2017                            |
| LEE, Jihong                          | (21) EP15164866.4                   | (33) Italy                                 |
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| Korea (Republic)                     | Garstecki, Gregory M.               | and method of operating a compressor       |
| (51) D06F 34/18                      | Malheiros, George W.                | (73) Electrolux Appliances Aktiebolag      |
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| TREATMENT APPARATUS AND              | D06F 33/37                          | (47) 07.07.2021                            |
| METHOD OF CONTROLLING THE            | D06F 103/38                         | (22) 07.02.2019                            |
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| (73) LG Electronics Inc.             | (11) EP3690115                      | LAUNDRY DRIERS                             |
| (72) IM, Myunghun                    | (21) EP20152444.4                   | (73) BSH Hausgeräte GmbH                   |
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| YU, Seonhwa                          | (22) 17.01.2020                     | BLANKEN, Maike                             |
| KIM, Sunggyun                        | (54) LAUNDRY TREATING APPARATUS     | MÜLLER, Klaus-Robert                       |
| WOO, Kyungchul                       | AND WATER SUPPLY CONTROL            | PRONOBIS, Wiktor                           |
| KIM, Jaehyun                         | METHOD THEREOF                      | VON DER WAYDBRINK, Ekkehard                |
| (31) 20180103077                     | (73) LG Electronics Inc.            | (31) 102018202527                          |
| (32) 30.08.2018                      | (72) PARK, Juhyeong                 | (32) 20.02.2018                            |
| (33) Korea (Republic)                | SEO, Minsoo                         | (33) Germany                               |
| (51) D06F 37/02                      | KANG, Dongwon                       | (51) D06F 58/36                            |
| D06F 37/04                           | (31) 20190014085                    | D06F 103/02                                |
| (11) EP3611297                       | 20190053215                         | D06F 103/04                                |
| (21) EP19190069.5                    | (32) 01.02.2019                     | D06F 103/44                                |
| (47) 07.07.2021                      | 07.05.2019                          | D06F 103/46                                |
| (22) 05.08.2019                      | (33) Korea (Republic)               | D06F 105/00                                |
| (54) LAUNDRY DRUM FOR A LAUNDRY      | Korea (Republic)                    | (11) EP3492649                             |
| PROCESSING MACHINE                   | (51) D06F 39/14                     | (21) EP18209735.2                          |
| (73) Miele & Cie. KG                 | D06F 58/04                          | (47) 14.07.2021                            |
| (72) MARKGRAF, Jürgen                | D06F 58/22                          | (22) 03.12.2018                            |
| ARING, Franz                         | D06F 58/24                          | (54) DRYER AND METHOD OF                   |
| BELLMANN, Heinz-Theo                 | (11) EP2843111                      | CONTROLLING THE SAME                       |
| BUCHMANN, Manfred                    | (21) EP14161141.8                   | (73) LG Electronics Inc.                   |
| SCHRÖDER, Andreas                    | (47) 07.07.2021                     | (72) SEO, Ilman                            |

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| JEONG, Deokjoon                    | (11) EP3455402                             | (87) EP2018081831                  |
| JANG, Minho                        | (21) EP17724720.2                          | 31.05.2019                         |
| (31) 20170164470                   | (47) 14.07.2021                            | (22) 20.11.2018                    |
| 20180151380                        | (87) AT2017060120                          | (54) METHOD FOR DETERMINING THE    |
| (32) 01.12.2017                    | 16.11.2017                                 | DRYNESS OF A FIBROUS WEB,          |
| 29.11.2018                         | (22) 08.05.2017                            | AND METHOD FOR CONTROLLING         |
| (33) Korea (Republic)              | (54) STEEL CABLE                           | OR REGULATING A MACHINE            |
| Korea (Republic)                   | (73) Teufelberger Seil Gesellschaft m.b.H. | FOR PRODUCING A PAPER WEB,         |
| (51) D06F 65/02                    | (72) TRAXL, Robert                         | AND COMPUTER PROGRAM FOR           |
| D06F 67/02                         | KAISER, Gunter                             | CARRYING OUT THE METHODS           |
| D06F 83/00                         | (31) 504272016                             | (73) Voith Patent GmbH             |
| (11) EP3628771                     | (32) 09.05.2016                            | (72) ACHTERMANN, Jan               |
| (21) EP19198552.2                  | (33) Austria                               | SCHWIER, Marcus                    |
| (47) 14.07.2021                    | (51) D21D 1/20                             | POPP, Marco                        |
| (22) 20.09.2019                    | D21D 5/02                                  | SCHÄFER, Jürgen                    |
| (54) DEVICE FOR MANGLING LAUNDRY   | D21H 11/08                                 | (31) 102017127932                  |
| (73) Herbert Kannegiesser GmbH     | D21H 15/02                                 | (32) 27.11.2017                    |
| (72) Heinz, Engelbert              | D21J 1/00                                  | (33) Germany                       |
| Markert, Klemens                   | D21J 7/00                                  | (51) D21F 7/00                     |
| (31) 102018007680                  | (11) EP3458644                             | D21F 9/00                          |
| 102018008406                       | (21) EP17719025.3                          | D21F 11/04                         |
| (32) 28.09.2018                    | (47) 14.07.2021                            | D21G 9/00                          |
| 25.10.2018                         | (87) SE2017050291                          | (11) EP3693509                     |
| (33) Germany                       | 23.11.2017                                 | (21) EP20155326.0                  |
| Germany                            | (22) 27.03.2017                            | (47) 14.07.2021                    |
| (51) D06F 89/02                    | (54) A WET-FORMED SOLID POROUS             | (22) 04.02.2020                    |
| (11) EP3676443                     | BODY, A PROCESS FOR                        | (54) FORMING SECTION FOR A MACHINE |
| (21) EP18766051.9                  | CONTROLLING STRUCTURAL AND                 | FOR PRODUCING A MULTI-PLY          |
| (47) 14.07.2021                    | MECHANICAL PROPERTIES IN THE               | FIBROUS WEB AND METHOD OF          |
| (87) IL2018050911                  | MANUFACTURE OF A SOLID POROUS              | PRODUCING A MULTI-PLY FIBROUS      |
| 07.03.2019                         | BODY AND PAPER MANUFACTURE,                | WEB                                |
| (22) 16.08.2018                    | AND A METHOD OF WET-FORMING                | (73) Voith Patent GmbH             |
| (54) DEVICE, METHOD AND SYSTEM FOR | THE SOLID POROUS BODY                      | (72) Moser, Johann                 |
| FOLDING A MOVING ARTICLE OF        | (73) Scandinavian Fibre Boards A/S         | (31) 102019103254                  |
| CLOTHING                           | (72) MOLTEBERG, Dag                        | (32) 11.02.2019                    |
| (73) Foldimate, Inc.               | JENSSEN, Gudmund                           | (33) Germany                       |
| (72) ROZOV, Gal                    | AXELSSON, Johan Patrik                     | (51) D21H 13/10                    |
| NAIM, Alon                         | STENSLÖKKEN, Joar Helge                    | D21H 13/24                         |
| NAOR, Isaac                        | BAJER, Per Thomas Gunnar                   | D21H 13/26                         |
| GABAI, Neil                        | DAHLSTRÖM, Lars                            | D21H 13/36                         |
| MATARASSO, Hasdi                   | (31) 1650684                               | D21H 17/28                         |
| (31) 201762551846 P                | (32) 20.05.2016                            | D21H 17/34                         |
| (32) 30.08.2017                    | (33) Sweden                                | D21H 23/26                         |
| (33) United States of America      | (51) D21F 3/10                             | (11) EP3433421                     |
| (51) D07B 1/06                     | (11) EP3802950                             | (21) EP17726662.4                  |
| D07B 5/12                          | (21) EP19728961.4                          | (47) 14.07.2021                    |
| (11) EP3259400                     | (47) 07.07.2021                            | (87) FI2017050210                  |
| (21) EP16705143.2                  | (87) EP2019064592                          | 28.09.2017                         |
| (47) 07.07.2021                    | 19.12.2019                                 | (22) 24.03.2017                    |
| (87) EP2016053347                  | (22) 05.06.2019                            | (54) METHOD OF PRODUCING A FIBROUS |
| 25.08.2016                         | (54) SEALING STRIP FOR SEALING A           | WEB CONTAINING NATURAL AND         |
| (22) 17.02.2016                    | POSITIVE OR NEGATIVE PRESSURE              | SYNTHETIC FIBRES                   |
| (54) MULTI-STRAND CABLE OF 1XN     | ZONE OF A ROLLER, ROLLER                   | (73) Paptic Ltd                    |
| STRUCTURE FOR PROTECTIVE           | COMPRISING SUCH A SEALING                  | (72) KINNUNEN-RAUDASKOSKI, Karita  |
| REINFORCEMENT OF A TIRE            | STRIP, AND METHODS FOR                     | TORNIAINEN, Esa                    |
| (73) Compagnie Générale des        | OPERATING THE ROLLER                       | MUSTONEN, Tuomas                   |
| Etablissements Michelin            | (73) Voith Patent GmbH                     | JUVONEN, Marja                     |
| (72) PIRONNEAU, Natacha            | (72) ERKELENZ, Marc                        | (31) 20165259                      |
| CLEMENT, Emmanuel                  | (31) 102018113832                          | (32) 24.03.2016                    |
| RAPENNE, Thibault                  | (32) 11.06.2018                            | (33) Finland                       |
| COLIN, Eric                        | (33) Germany                               | (51) D21H 27/00                    |
| CHAVAROT, Pascal                   | (51) D21F 5/18                             | (11) EP3526401                     |
| (31) 1551378                       | D21F 11/00                                 | (21) EP17791877.8                  |
| (32) 19.02.2015                    | D21F 11/14                                 | (47) 14.07.2021                    |
| (33) France                        | D21G 9/00                                  | (87) US2017056982                  |
| (51) D07B 1/14                     | (11) EP3717695                             | 26.04.2018                         |
| D07B 5/00                          | (21) EP18807594.9                          | (22) 17.10.2017                    |
| D07B 7/02                          | (47) 07.07.2021                            |                                    |

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|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|
| (54) FIBROUS STRUCTURE-CONTAINING ARTICLES THAT EXHIBIT CONSUMER RELEVANT PROPERTIES | (73) Caterpillar Paving Products Inc.                                                                                     | (32) 17.07.2017                               |
| (73) The Procter & Gamble Company                                                    | (72) Marsolek, John Lee                                                                                                   | (33) Macedonia (The Former Yugoslav Republic) |
| (72) YOUNG, Christopher Michael                                                      | Toby, Frelich                                                                                                             |                                               |
| STELLJES, Michael Gomer                                                              | Kent, Hoisington                                                                                                          | (51) E01F 13/02                               |
| SUER, Michael Donald                                                                 | (51) E01C 19/00                                                                                                           | E01F 13/12                                    |
| KLAWITTER, Timothy James                                                             | E01C 23/088                                                                                                               | E01F 15/08                                    |
| DENBOW, James Roy                                                                    | (11) EP3339509                                                                                                            | (11) EP3684979                                |
| BARNHOLTZ, Steven Lee                                                                | (21) EP17001937.6                                                                                                         | (21) EP17784013.9                             |
| SHEEHAN, Jeffrey Glen                                                                | (47) 07.07.2021                                                                                                           | (47) 14.07.2021                               |
| TROKHAN, Paul Dennis                                                                 | (22) 27.11.2017                                                                                                           | (87) IB2017055684                             |
| (31) 201662409202 P                                                                  | (54) ROAD-MILLING MACHINE AND METHOD FOR OPERATING SAME                                                                   | 28.03.2019                                    |
| (32) 17.10.2016                                                                      | (73) Dynapac GmbH                                                                                                         | (22) 20.09.2017                               |
| (33) United States of America                                                        | (72) Chasse, Jean-Rémy                                                                                                    | (54) FENCE COMPRISING FENCE MODULES           |
| (51) D21H 27/00                                                                      | Kramer, Thomas                                                                                                            | (73) Guardiar Europe BVBA                     |
| D21H 27/30                                                                           | Joseph, Seby                                                                                                              | (72) MESSELIS, Timothy                        |
| D21H 27/32                                                                           | (31) 102016015422                                                                                                         | (51) E01F 13/04                               |
| D21H 27/38                                                                           | (32) 23.12.2016                                                                                                           | (11) EP2450488                                |
| (11) EP3526402                                                                       | (33) Germany                                                                                                              | (21) EP11405351.5                             |
| (21) EP17791878.6                                                                    | (51) E01C 19/40                                                                                                           | (47) 07.07.2021                               |
| (47) 14.07.2021                                                                      | (11) EP2955271                                                                                                            | (22) 03.11.2011                               |
| (87) US2017056985                                                                    | (21) EP15153903.8                                                                                                         | (54) Retractable mast for barriers            |
| 26.04.2018                                                                           | (47) 07.07.2021                                                                                                           | (73) Rogantini, Luca                          |
| (22) 17.10.2017                                                                      | (22) 05.02.2015                                                                                                           | (72) Rogantini, Luca                          |
| (54) FIBROUS STRUCTURE-CONTAINING ARTICLES                                           | (54) Selective clamping of chassis                                                                                        | (31) 18552010                                 |
| (73) The Procter & Gamble Company                                                    | (73) Wirtgen GmbH                                                                                                         | (32) 05.11.2010                               |
| (72) YOUNG, Christopher Michael                                                      | (72) DAHM, Martin                                                                                                         | (33) Switzerland                              |
| STELLJES, Michael Gomer                                                              | SCHUG, Ralf                                                                                                               | (51) E01F 15/14                               |
| SUER, Michael Donald                                                                 | BARIMANI, Cyrus                                                                                                           | (11) EP3366841                                |
| KLAWITTER, Timothy James                                                             | HÄHN, Günter                                                                                                              | (21) EP16906418.5                             |
| DENBOW, James Roy                                                                    | (31) 201414299911                                                                                                         | (47) 14.07.2021                               |
| BARNHOLTZ, Steven Lee                                                                | (32) 09.06.2014                                                                                                           | (87) RU2016000776                             |
| SHEEHAN, Jeffrey Glen                                                                | (33) United States of America                                                                                             | 28.12.2017                                    |
| TROKHAN, Paul Dennis                                                                 | (51) E01C 19/50                                                                                                           | (22) 14.11.2016                               |
| (31) 201662409114 P                                                                  | E04B 1/68                                                                                                                 | (54) DAMPING DEVICE                           |
| (32) 17.10.2016                                                                      | E04B 5/32                                                                                                                 | (73) Makarov, Georgy Vladimirovich            |
| (33) United States of America                                                        | E04C 5/16                                                                                                                 | (72) NEMOV, Ivan Petrovich                    |
| (51) E01B 15/00                                                                      | E04G 11/36                                                                                                                | KURBATOV, Vitaly Viktorovich                  |
| E01B 21/02                                                                           | E04G 17/14                                                                                                                | MAKAROV, Georgy Vladimirovich                 |
| (11) EP3631086                                                                       | E04G 25/04                                                                                                                | (31) 2016124324                               |
| (21) EP18737145.5                                                                    | F16B 2/18                                                                                                                 | 2016124955                                    |
| (47) 07.07.2021                                                                      | F16B 7/04                                                                                                                 | (32) 20.06.2016                               |
| (87) DE2018200052                                                                    | (11) EP3456902                                                                                                            | 22.06.2016                                    |
| 29.11.2018                                                                           | (21) EP18193133.8                                                                                                         | (33) Russian Federation                       |
| (22) 22.05.2018                                                                      | (47) 07.07.2021                                                                                                           | Russian Federation                            |
| (54) RAIL ASSEMBLY FOR RAIL VEHICLES HAVING FLANGED WHEELS                           | (22) 07.09.2018                                                                                                           | (51) E01F 15/14                               |
| (73) SEALABLE Solutions GmbH                                                         | (54) LOST FORMWORK FOR CONCRETE CONSTRUCTIONS                                                                             | (11) EP3739125                                |
| (72) KLUG, Matthias                                                                  | (73) FWR Solutions GmbH                                                                                                   | (21) EP19188537.5                             |
| PAHL, Bernd                                                                          | (72) FISCHER, Willibald                                                                                                   | (47) 14.07.2021                               |
| GARBE, Tino                                                                          | (31) 102017216383                                                                                                         | (22) 26.07.2019                               |
| KLEIN, Nicola                                                                        | (32) 15.09.2017                                                                                                           | (54) IMPACT ABSORBER FOR TRAFFIC PATHS        |
| R DT, Andrea                                                                         | (33) Germany                                                                                                              | (73) SPS SCHUTZPLANKEN GMBH                   |
| (31) 102017111298                                                                    | (51) E01F 9/529                                                                                                           | (72) URLBERGER, Karl                          |
| (32) 23.05.2017                                                                      | (11) EP3655588                                                                                                            | (31) 202019102802 U                           |
| (33) Germany                                                                         | (21) EP18758747.2                                                                                                         | 202019103726 U                                |
| (51) E01C 19/00                                                                      | (47) 14.07.2021                                                                                                           | (32) 17.05.2019                               |
| E01C 19/48                                                                           | (87) MK2018000003                                                                                                         | 08.07.2019                                    |
| E01C 23/07                                                                           | 24.01.2019                                                                                                                | (33) Germany                                  |
| G05D 1/02                                                                            | (22) 12.07.2018                                                                                                           | Germany                                       |
| (11) EP3276079                                                                       | (54) DEVICE WITH ELECTRICAL OR PNEUMATIC ACTUATION OF A FOLDING MECHANISM FOR ENCOURAGEMENT OF REDUCTION OF VEHICLE SPEED | (51) E02B 7/00                                |
| (21) EP16181264.9                                                                    | (73) Nastev, Viktor                                                                                                       | F16M 11/10                                    |
| (47) 14.07.2021                                                                      | (72) Nastev, Viktor                                                                                                       | F16N 31/00                                    |
| (22) 26.07.2016                                                                      | (31) 54217                                                                                                                | (11) EP3274514                                |
| (54) CONTROL SYSTEM FOR A ROAD PAVER                                                 |                                                                                                                           | (21) EP15886682.2                             |
|                                                                                      |                                                                                                                           | (47) 07.07.2021                               |
|                                                                                      |                                                                                                                           | (87) US2015024035                             |

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| 29.09.2016                              | (31) 201662339499 P                           | Caterpillar Inc.                    |
| (22) 02.04.2015                         | (32) 20.05.2016                               | (72) METZGER, Tony R.               |
| (54) FLUID CONTAINMENT APPARATUSES      | (33) United States of America                 | WIEWEL, Bruce J.                    |
| AND WALL SUPPORTS FOR FLUID             | (51) E02D 27/42                               | POWERS, Robert L.                   |
| CONTAINMENT APPARATUSES                 | F03D 13/10                                    | EVENSON, Richard R.                 |
| (73) Basic Concepts, Inc.               | (11) EP2302137                                | (31) 201715602592                   |
| (72) BEAK, Todd, David                  | (21) EP09735813.9                             | (32) 23.05.2017                     |
| JOHNSON, Kurt, William                  | (47) 14.07.2021                               | (33) United States of America       |
| GUFFEE, Russell, J.                     | (87) ES2009000160                             | (51) E02F 9/16                      |
| RICCIUTO, Thomas, M.                    | 29.10.2009                                    | E02F 9/26                           |
| HORNING, Michael, David                 | (22) 23.03.2009                               | (11) EP3591125                      |
| COCHRAN, Craig, J.                      | (54) SUPPORTING ELEMENT FOR                   | (21) EP18760258.6                   |
| BROWN, Ellen, Yea-Yi                    | AN OFFSHORE WIND TURBINE,                     | (47) 14.07.2021                     |
| (31) 201514666780                       | PRODUCTION METHOD THEREOF                     | (87) JP2018007710                   |
| (32) 24.03.2015                         | AND METHOD FOR INSTALLING SAME                | 07.09.2018                          |
| (33) United States of America           | (73) Nordex Energy Spain, S.A.                | (22) 01.03.2018                     |
| (51) E02B 17/00                         | Acciona Energía, S.A.                         | (54) EXCAVATOR                      |
| H02G 1/08                               | (72) NUÑEZ POLO, Miguel                       | (73) Sumitomo (S.H.I.) Construction |
| H02G 1/10                               | MANZANAS OCHAGAVIA, Raúl                      | Machinery Co., Ltd.                 |
| H02G 9/02                               | SANCHO CASTELLO, Federico                     | (72) SAKUTA, Sou                    |
| H02G 9/06                               | (31) 200801178                                | (31) 2017039216                     |
| H02G 9/12                               | (32) 24.04.2008                               | (32) 02.03.2017                     |
| (11) EP3577731                          | (33) Spain                                    | (33) Japan                          |
| (21) EP17816550.2                       | (51) E02F 3/32                                | (51) E02F 9/22                      |
| (47) 14.07.2021                         | E02F 9/20                                     | F16H 61/4008                        |
| (87) EP2017080738                       | G05G 9/047                                    | F16H 61/4139                        |
| 13.09.2018                              | (11) EP3569771                                | F16H 61/433                         |
| (22) 29.11.2017                         | (21) EP19173566.1                             | F16H 61/465                         |
| (54) CABLE HANG-OFF ARRANGEMENT         | (47) 07.07.2021                               | F16H 61/478                         |
| (73) Siemens Gamesa Renewable Energy A/ | (22) 09.05.2019                               | (11) EP3208495                      |
| S                                       | (54) A WORKING MACHINE JOYSTICK               | (21) EP17154151.9                   |
| (72) SOERENSEN, Johnny                  | ASSEMBLY                                      | (47) 07.07.2021                     |
| (31) 102017203897                       | (73) J.C. Bamford Excavators Ltd.             | (22) 01.02.2017                     |
| (32) 09.03.2017                         | (72) Graham, Alina Keziah                     | (54) CONTROL DEVICE FOR HYDRAULIC   |
| (33) Germany                            | Corrochano, David Garcia                      | TRAVELING DEVICE                    |
| (51) E02D 5/72                          | Freethy, Thomas                               | (73) Takeuchi MFG.Co.,Ltd.          |
| E02D 13/00                              | (31) 201807820                                | (72) KONDO, Hiroki                  |
| E02D 27/52                              | (32) 14.05.2018                               | OKUTANI, Shumpei                    |
| (11) EP3464734                          | (33) United Kingdom                           | KAKURYU, Takeshi                    |
| (21) EP17728089.8                       | (51) E02F 3/36                                | TAKIZAWA, Takato                    |
| (47) 07.07.2021                         | E02F 9/22                                     | SATO, Tomonori                      |
| (87) EP2017062717                       | F15B 15/06                                    | (31) 2016028525                     |
| 30.11.2017                              | F15B 15/08                                    | 2016168514                          |
| (22) 25.05.2017                         | (11) EP3259407                                | 2016245389                          |
| (54) FOUNDATION PILE INSTALLATION       | (21) EP16751962.8                             | (32) 18.02.2016                     |
| DEVICE                                  | (47) 07.07.2021                               | 30.08.2016                          |
| (73) GBM Works B.V.                     | (87) DK2016050047                             | 19.12.2016                          |
| (72) ARNTZ, Bernardus Johannes Maria    | 25.08.2016                                    | (33) Japan                          |
| NOORDAM, Nicolaas Michiel               | (22) 18.02.2016                               | Japan                               |
| (31) 201662341214 P                     | (54) HYDRAULIC DEVICE                         | Japan                               |
| (32) 25.05.2016                         | (73) 380 Invent APS                           | (51) E02F 9/22                      |
| (33) United States of America           | (72) DUUS, Daniel                             | F16H 61/431                         |
| (51) E02D 5/74                          | GADE, Maria                                   | F16H 61/465                         |
| E04B 1/98                               | (31) 201500098                                | (11) EP3553349                      |
| F16B 2/06                               | (32) 19.02.2015                               | (21) EP18823733.3                   |
| F16B 5/06                               | (33) Denmark                                  | (47) 07.07.2021                     |
| F16B 7/18                               | (51) E02F 3/84                                | (87) JP2018020534                   |
| F16L 3/00                               | E02F 9/20                                     | 03.01.2019                          |
| F16L 3/24                               | G05B 13/02                                    | (22) 29.05.2018                     |
| (11) EP3458756                          | (11) EP3635181                                | (54) WORK VEHICLE AND METHOD FOR    |
| (21) EP17800100.4                       | (21) EP18730547.9                             | CONTROLLING WORK VEHICLE            |
| (47) 07.07.2021                         | (47) 07.07.2021                               | (73) Komatsu Ltd.                   |
| (87) US2017033131                       | (87) US2018032979                             | (72) OASA, Takahisa                 |
| 23.11.2017                              | 29.11.2018                                    | (31) 2017125375                     |
| (22) 17.05.2017                         | (22) 16.05.2018                               | (32) 27.06.2017                     |
| (54) FLANGE ADAPTER                     | (54) BLADE CONTROL BELOW DESIGN               | (33) Japan                          |
| (73) Erico International Corporation    | (73) Caterpillar Trimble Control Technologies | (51) E02F 9/28                      |
| (72) ANDERSON, Scott                    | LLC                                           | (11) EP3400340                      |

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| (47) 14.07.2021                    | E03D 1/38                          | (21) EP17160984.5                     |
| (87) US2016067785                  | E03D 5/10                          | (47) 14.07.2021                       |
| 13.07.2017                         | E03D 11/02                         | (22) 15.03.2017                       |
| (22) 20.12.2016                    | E03D 11/18                         | (54) CONNECTION COMPONENT FOR         |
| (54) TOOL RETENTION SYSTEM HAVING  | (11) EP3763890                     | THERMAL ISOLATION BETWEEN             |
| POCKETED WEDGE                     | (21) EP20185243.1                  | A VERTICAL AND HORIZONTAL             |
| (73) Caterpillar Inc.              | (47) 07.07.2021                    | BUILDING PART                         |
| (72) CAMPOMANES, Patrick Simon     | (22) 10.07.2020                    | (73) SCHÖCK BAUTEILE GmbH             |
| (31) 201614987424                  | (54) FLUSHING GROUP FOR TOILET     | (31) 102016106036                     |
| (32) 04.01.2016                    | BOWL AND TOILET BOWL USING SAID    | (32) 01.04.2016                       |
| (33) United States of America      | FLUSHING GROUP                     | (33) Germany                          |
| (51) E03B 7/00                     | (73) CEADDESIGN SRL                | (51) E04B 1/24                        |
| F16L 19/02                         | (72) MALASORTI, Natalino           | E04B 1/30                             |
| F16L 27/08                         | (31) 201900011310                  | E04H 9/02                             |
| F16L 37/088                        | (32) 10.07.2019                    | (11) EP3754127                        |
| F16L 43/00                         | (33) Italy                         | (21) EP18915659.9                     |
| F24D 17/00                         | (51) E03D 1/14                     | (47) 14.07.2021                       |
| (11) EP3746692                     | E03D 5/02                          | (87) CN2018094606                     |
| (21) EP19702825.1                  | E03D 5/09                          | 24.10.2019                            |
| (47) 07.07.2021                    | G05G 5/04                          | (22) 05.07.2018                       |
| (87) EP2019051602                  | (11) EP3235963                     | (54) FABRICATED INTELLIGENT JOINT     |
| 08.08.2019                         | (21) EP17158369.3                  | PROVIDED WITH PARTICLE                |
| (22) 23.01.2019                    | (47) 14.07.2021                    | DAMPING CHAMBERS FOR ENERGY           |
| (54) WATER PIPE WITH PIPE FITTING  | (22) 27.02.2013                    | DISSIPATION AND ASSEMBLY              |
| (73) Spiegel, Doris                | (54) ACTUATION MECHANISM FOR A     | METHOD                                |
| Spiegel, Herbert                   | MULTI-FLUSH TOILET ASSEMBLY        | (73) Qingdao University of Technology |
| (72) SPIEGEL, Herbert              | (73) Kohler Co.                    | (72) MOU, Ben                         |
| (31) 102018102020                  | (72) LAMBERT, Tony L.              | FENG, Peng                            |
| (32) 30.01.2018                    | GARRELS, Clayton C.                | LIU, Yi                               |
| (33) Germany                       | BOGARD, Douglas                    | (31) 201810358579                     |
| (51) E03B 7/07                     | HALLORAN, Daniel N.                | (32) 20.04.2018                       |
| G01F 15/00                         | MESUN, Randy O.                    | (33) China                            |
| G01F 25/00                         | (31) 201261604355 P                | (51) E04B 2/02                        |
| G01M 3/24                          | (32) 28.02.2012                    | E04B 2/10                             |
| (11) EP3677890                     | (33) United States of America      | E04B 2/24                             |
| (21) EP19219958.6                  | (51) E03F 3/04                     | E04C 1/41                             |
| (47) 14.07.2021                    | F16B 5/06                          | (11) EP3553242                        |
| (22) 30.12.2019                    | F16B 5/07                          | (21) EP19167687.3                     |
| (54) SYSTEM FOR MONITORING A       | F16L 41/08                         | (47) 07.07.2021                       |
| WATER METER WITH DEVICE            | (11) EP3441662                     | (22) 05.04.2019                       |
| FOR DETECTING A WATER LEAK         | (21) EP18186264.0                  | (54) CONSTRUCTION ELEMENT SUCH        |
| DOWNSTREAM OF THE WATER            | (47) 07.07.2021                    | AS A BRICK, BREEZE-BLOCK OR           |
| METER                              | (22) 30.07.2018                    | STONE BLOCK, AND CORNER UNIT          |
| (73) Protecto                      | (54) CONNECTION PIPE               | COMPRISING AT LEAST ONE SUCH          |
| (72) AMARA, Mourad                 | (73) REHAU AG + Co                 | STACK                                 |
| (31) 1900027                       | (72) Schneider, Christoph          | (73) Collard, Sébastien               |
| (32) 03.01.2019                    | Sieber, Jürgen                     | (72) Collard, Sébastien               |
| (33) France                        | Hendel, Roland                     | (31) 1853035                          |
| (51) E03C 1/02                     | Lipphardt, Tobias                  | (32) 06.04.2018                       |
| E03C 1/04                          | Ciolak, Mariusz                    | (33) France                           |
| E03C 1/042                         | (31) 202017104708 U                | (51) E04B 2/72                        |
| F16L 43/00                         | (32) 07.08.2017                    | E04C 2/04                             |
| F16L 59/16                         | (33) Germany                       | E04F 13/06                            |
| (11) EP3670766                     | (51) E03F 7/10                     | E04F 19/02                            |
| (21) EP19218297.0                  | (11) EP3495577                     | E04F 19/04                            |
| (47) 14.07.2021                    | (21) EP18211770.5                  | E04F 19/06                            |
| (22) 19.12.2019                    | (47) 14.07.2021                    | F16S 1/02                             |
| (54) CONNECTION SET FOR A DRINKING | (22) 11.12.2018                    | (11) EP3599317                        |
| OR DOMESTIC WATER INSTALLATION     | (54) DEVICE FOR A ROAD VEHICLE AND | (21) EP19174660.1                     |
| (73) Gebr. Kemper GmbH + Co. KG    | ROAD VEHICLE WITH SUCH A DEVICE    | (47) 07.07.2021                       |
| Metallwerke                        | (73) Hinrichs, Gerold              | (22) 15.05.2019                       |
| (72) SPÖLER, Thomas                | (72) Hinrichs, Gerold              | (54) PREFABRICATED ELEMENT FOR        |
| Markert, Felix                     | (31) 202017107533 U                | THE REALISATION OF CORNERS IN         |
| (31) 202018005943 U                | (32) 11.12.2017                    | DRYWALL                               |
| (32) 20.12.2018                    | (33) Germany                       | (73) Schmitt Verwaltungs GmbH         |
| (33) Germany                       | (51) E04B 1/00                     | (72) SCHMITT, Reiner                  |
| (51) E03D 1/00                     | E04B 1/76                          | (31) 102018117875                     |



|                                     |                                          |                                      |
|-------------------------------------|------------------------------------------|--------------------------------------|
| (32) 24.07.2018                     | (73) Myd"L"                              | (32) 23.08.2017                      |
| (33) Germany                        | (72) BELMAN, Pierre                      | (33) United States of America        |
| (51) E04B 2/82                      | ENGLER, Frédéric                         | (51) E04F 15/02                      |
| (11) EP3101192                      | (31) 1561689                             | E04F 15/10                           |
| (21) EP16172304.4                   | (32) 01.12.2015                          | (11) EP3527743                       |
| (47) 14.07.2021                     | (33) France                              | (21) EP19167121.3                    |
| (22) 31.05.2016                     | (51) E04F 11/18                          | (47) 07.07.2021                      |
| (54) PARTITION WALL ELEMENT         | (11) EP3453813                           | (22) 24.10.2014                      |
| (73) dormakaba Deutschland GmbH     | (21) EP17190287.7                        | (54) MECHANICAL LOCKING SYSTEM FOR   |
| (72) LANWEHR, Thomas                | (47) 07.07.2021                          | FLOOR PANELS                         |
| (31) 102015108663                   | (22) 11.09.2017                          | (73) Ceraloc Innovation AB           |
| (32) 01.06.2015                     | (54) HANDRAIL INSTALLATION WITH          | (72) PERVAN, Darko                   |
| (33) Germany                        | EMERGENCY LIGHTING                       | (31) 1351273                         |
| (51) E04B 2/96                      | (73) Woertz Engineering AG               | (32) 25.10.2013                      |
| E04F 13/08                          | (72) ONODI, Tamas                        | (33) Sweden                          |
| (11) EP3767053                      | DREIER, Andreas                          | (51) E04F 15/02                      |
| (21) EP19187463.5                   | BUSER, Yannick                           | E04F 15/14                           |
| (47) 07.07.2021                     | (51) E04F 11/18                          | (11) EP3382123                       |
| (22) 19.07.2019                     | F16B 2/06                                | (21) EP18159534.9                    |
| (54) DEVICE FOR APPLYING PLATE-     | F16B 2/14                                | (47) 07.07.2021                      |
| SHAPED FACADE ELEMENTS TO A         | F16B 5/06                                | (22) 01.03.2018                      |
| SUBSURFACE FIXED TO A BUILDING      | F16B 5/12                                | (54) MINIMISATION OF WATER DAMAGE IN |
| SIDE OR A SUBSTRUCTURE FIXED        | (11) EP3742003                           | BUILDINGS                            |
| TO A BUILDING SIDE, FACADE WITH     | (21) EP19175783.0                        | (73) Führer, Gerhard                 |
| PLATE-SHAPED FACADE ELEMENTS        | (47) 07.07.2021                          | (72) Führer, Gerhard                 |
| (73) STO SE & Co. KGaA              | (22) 21.05.2019                          | (31) 102017106540                    |
| (72) Wolf, Harald                   | (54) HOLDER DEVICE FOR A SURFACE         | (32) 27.03.2017                      |
| (51) E04C 2/284                     | ELEMENT                                  | (33) Germany                         |
| E04F 13/08                          | (73) Pauli + Sohn GmbH Metallwaren       | (51) E04F 15/02                      |
| (11) EP3631117                      | (72) Schneider, Torben                   | E04F 21/00                           |
| (21) EP18740283.9                   | (51) E04F 15/00                          | E04F 21/18                           |
| (47) 14.07.2021                     | F24D 3/14                                | (11) EP3564463                       |
| (87) IB2018053860                   | (11) EP3497373                           | (21) EP19167680.8                    |
| 06.12.2018                          | (21) EP17754465.7                        | (47) 07.07.2021                      |
| (22) 30.05.2018                     | (47) 14.07.2021                          | (22) 05.04.2019                      |
| (54) A SYSTEM FOR FIXING PANELS ON  | (87) GB2017052333                        | (54) SPACER FOR LAYING TILES,        |
| THE FACADES OF THE BUILDINGS        | 15.02.2018                               | BRICKS AND THE LIKE WITH THE         |
| (73) Hit Consulting SP Z O.O.       | (22) 08.08.2017                          | INTERPOSITION OF GAPS                |
| (72) CHODOROWSKI, Adam Jacek        | (54) HEAT TRANSFER PANEL                 | (73) Progress Profiles SPA           |
| GALUS, Wieslaw                      | (73) Omnie Limited                       | (72) BORDIN, Dennis                  |
| (31) 42176117                       | (72) TRIVETT, Darren                     | (31) 201800005016                    |
| (32) 31.05.2017                     | (31) 201613739                           | (32) 03.05.2018                      |
| (33) Poland                         | (32) 10.08.2016                          | (33) Italy                           |
| (51) E04C 2/52                      | (33) United Kingdom                      | (51) E04F 17/08                      |
| E04G 15/06                          | (51) E04F 15/02                          | F16L 3/00                            |
| F16L 5/10                           | (11) EP3521528                           | (11) EP3368729                       |
| H02G 3/12                           | (21) EP19155515.0                        | (21) EP16860384.3                    |
| (11) EP3477175                      | (47) 14.07.2021                          | (47) 14.07.2021                      |
| (21) EP17020491.1                   | (22) 05.02.2019                          | (87) SE2016051024                    |
| (47) 07.07.2021                     | (54) FASTENERS AND KITS OF PARTS         | 04.05.2017                           |
| (22) 24.10.2017                     | (73) SW International B.V.               | (22) 21.10.2016                      |
| (54) USE OF AN INSERTED ELEMENT AND | (72) SEELEN, Johannes Josephus Hendrikus | (54) A SHAFT PIPE COLLECTION MODULE  |
| A PIPE ELEMENT TO BE INSERTED IN    | WIEGANT, Bartholomeus Maria              | (73) Concentus Properties AB         |
| A WALL OR FLOOR ELEMENT             | (31) 2020387                             | (72) LUNDHOLM, Anton                 |
| (73) Hauff-Technik GmbH & Co. KG    | (32) 06.02.2018                          | (31) 1551378                         |
| (72) Delikostas, Christos           | (33) Netherlands                         | (32) 26.10.2015                      |
| Egritepe, Senol                     | (51) E04F 15/02                          | (33) Sweden                          |
| (51) E04F 11/00                     | E04F 15/04                               | (51) E04F 21/00                      |
| E04F 11/06                          | (11) EP3447210                           | E04F 21/22                           |
| (11) EP3384102                      | (21) EP18188552.6                        | (11) EP3584389                       |
| (21) EP16813094.6                   | (47) 14.07.2021                          | (21) EP19177427.2                    |
| (47) 07.07.2021                     | (22) 10.08.2018                          | (47) 14.07.2021                      |
| (87) FR2016053149                   | (54) FLOOR PANEL FOR FORMING A           | (22) 29.05.2019                      |
| 08.06.2017                          | FLOOR COVERING                           | (54) LEVELLING SPACER DEVICE         |
| (22) 30.11.2016                     | (73) Flooring Industries Limited, SARL   | (73) Raimondi S.p.A.                 |
| (54) DEVICE FOR HELPING A VEHICLE   | (72) DE RICK, Jan                        | (72) SIGHINOLFI, Riccardo            |
| PASS OVER AN OBSTACLE               | (31) 201762549109 P                      | (31) 201800006440                    |

|                                         |                                   |                                         |
|-----------------------------------------|-----------------------------------|-----------------------------------------|
| (32) 19.06.2018                         | (21) EP19164203.2                 | (31) 201662431677 P                     |
| (33) Italy                              | (47) 07.07.2021                   | (32) 08.12.2016                         |
| (51) E04H 4/08                          | (22) 21.03.2019                   | (33) United States of America           |
| E04H 4/10                               | (54) CENTRING ASSEMBLY FOR A DOOR | (51) E05B 15/02                         |
| G08B 13/00                              | HANDLE FITTING AND DOOR HANDLE    | E05B 17/00                              |
| (11) EP3214237                          | FITTING WITH SUCH A POSITIONING   | E05B 17/20                              |
| (21) EP17158816.3                       | ARRANGEMENT                       | E05B 63/00                              |
| (47) 07.07.2021                         | (73) HOPPE AG                     | E05B 63/20                              |
| (22) 02.03.2017                         | (72) Karnutsch, Elias             | E05C 9/02                               |
| (54) METHOD FOR CONTROLLING AT          | Pitz, Andreas                     | E05C 9/18                               |
| LEAST ONE POOL APPARATUS                | Schuberth, Oliver                 | (11) EP3619382                          |
| ACCORDING TO A CONFIGURATION            | (31) 102018106745                 | (21) EP18723938.9                       |
| OF A COVER ELEMENT AND DEVICES          | (32) 21.03.2018                   | (47) 07.07.2021                         |
| THEREFORE                               | (33) Germany                      | (87) GB2018051204                       |
| (73) A.S.Pool                           | (51) E05B 9/10                    | 08.11.2018                              |
| (72) ROUX, Régis                        | E05B 17/20                        | (22) 04.05.2018                         |
| (31) 1651757                            | (11) EP3222799                    | (54) LOCKING ASSEMBLY                   |
| (32) 02.03.2016                         | (21) EP17158233.1                 | (73) ERA Home Security Limited          |
| (33) France                             | (47) 14.07.2021                   | (72) WALKER, Rob                        |
| (51) E04H 5/04                          | (22) 27.02.2017                   | SANGHA, Irundip                         |
| H01F 27/02                              | (54) A CYLINDER LOCK              | (31) 201707144                          |
| H05K 5/00                               | (73) O'Sullivan, Mark             | (32) 04.05.2017                         |
| (11) EP3025359                          | O'Sullivan, Marcus                | (33) United Kingdom                     |
| (21) EP13811783.3                       | (72) O'Sullivan, Mark             | (51) E05B 15/02                         |
| (47) 07.07.2021                         | O'Sullivan, Marcus                | E05B 77/36                              |
| (87) EP2013003602                       | (31) 201604226                    | E05B 77/38                              |
| 29.01.2015                              | 201701578                         | E05B 85/04                              |
| (22) 28.11.2013                         | (32) 11.03.2016                   | (11) EP3401474                          |
| (54) A PREASSEMBLED TRANSFORMER         | 31.01.2017                        | (21) EP17169882.2                       |
| SUBSTATION                              | (33) United Kingdom               | (47) 07.07.2021                         |
| (73) ABB Schweiz AG                     | United Kingdom                    | (22) 08.05.2017                         |
| (72) PEDERSEN, Ivan                     | (51) E05B 13/00                   | (54) STRIKER UNIT FOR A MOTOR           |
| LIU, Jin Lou                            | E05B 65/08                        | VEHICLE                                 |
| WANG, Liang                             | E05C 19/00                        | (73) Huf Hülsbeck & Fürst GmbH & Co. KG |
| LIN, Lu                                 | E05D 15/56                        | (72) Berghahn, Jörg                     |
| WANG, Yao Ming                          | E05F 11/10                        | (51) E05B 15/16                         |
| (31) 201320453033 U                     | (11) EP3568548                    | E05B 19/26                              |
| (32) 26.07.2013                         | (21) EP17832979.3                 | E05B 27/00                              |
| (33) China                              | (47) 14.07.2021                   | G07C 9/00                               |
| (51) E04H 7/04                          | (87) GR2017000071                 | (11) EP3131067                          |
| E04H 7/16                               | 19.07.2018                        | (21) EP16182294.5                       |
| E04H 7/18                               | (22) 21.12.2017                   | (47) 14.07.2021                         |
| F17C 1/02                               | (54) HIDDEN UPLIFTING FRAME WITH  | (22) 02.08.2016                         |
| F17C 1/12                               | LOCKING MECHANISM                 | (54) KEY FOR AN ELECTRONIC OR           |
| F17C 3/00                               | (73) SEU PLASTICS ONE MAN L.L.C.  | MECHATRONIC LOCK AND KEY                |
| B65D 90/02                              | (72) MYLONAS, Alexandros          | SYSTEM AND LOCK AND KEY                 |
| (11) EP3121506                          | (31) 20170100001                  | SYSTEM FOR A KEY                        |
| (21) EP15764915.3                       | (32) 13.01.2017                   | (73) ASSA ABLOY Sicherheitstechnik GmbH |
| (47) 07.07.2021                         | (33) Greece                       | (72) Matschke, Steffen                  |
| (87) KR2015002775                       | (51) E05B 15/00                   | (31) 102015113416                       |
| 24.09.2015                              | E05B 17/00                        | (32) 14.08.2015                         |
| (22) 20.03.2015                         | E05B 17/18                        | (33) Germany                            |
| (54) GROUND LIQUEFIED NATURAL GAS       | E05B 17/20                        | (51) E05B 15/16                         |
| STORAGE TANK AND METHOD FOR             | E05C 3/04                         | E05B 67/00                              |
| MANUFACTURING SAME                      | E05C 5/02                         | (11) EP3507434                          |
| (73) Hyundai Heavy Industries Co., Ltd. | (11) EP3551822                    | (21) EP17847617.2                       |
| (72) SHIN, Sang Beom                    | (21) EP17818410.7                 | (47) 07.07.2021                         |
| KIM, Dae Soon                           | (47) 07.07.2021                   | (87) US2017049828                       |
| CHUN, In Soo                            | (87) US2017065038                 | 08.03.2018                              |
| LEE, Dong Ju                            | 14.06.2018                        | (22) 01.09.2017                         |
| JEONG, Se Hwan                          | (22) 07.12.2017                   | (54) CERAMIC SPINE SECURITY CABLE       |
| SHIN, Dong Kyu                          | (54) LATCH HAVING COVER           | (73) Schlage Lock Company LLC           |
| (31) 20140033606                        | (73) Southco, Inc.                | (72) HOLMES, Douglas A.                 |
| (32) 21.03.2014                         | (72) MANLY, Jonathan, Edward      | KINDSTRAND, Daniel H.                   |
| (33) Korea (Republic)                   | THORNTON, Andrew, James           | EIDMAN, Jonah S.                        |
| (51) E05B 3/00                          | DENNEHY, Jack                     | HOU, Gideon                             |
| E05B 63/00                              | POST, Michael                     | LIU, Thomas Y.                          |
| (11) EP3543433                          | AUKZEMAS, Thomas, V.              | STOLZ, Ryan T.                          |

|                                          |                                       |                                             |
|------------------------------------------|---------------------------------------|---------------------------------------------|
| (31) 201662382379 P                      | AND A COMPUTER READABLE               | (33) Germany                                |
| (32) 01.09.2016                          | MEDIUM FOR PERFORMING SUCH A          | Germany                                     |
| (33) United States of America            | METHOD                                |                                             |
| (51) E05B 17/22                          | (73) Shandong New Beiyang Information | (51) E05C 17/02                             |
| E05B 63/08                               | Technology Co., Ltd.                  | E05C 17/30                                  |
| (11) EP3543440                           | (72) XU, Jiabo                        | F16F 9/02                                   |
| (21) EP19163164.7                        | BAO, Pengxu                           | F16F 9/56                                   |
| (47) 07.07.2021                          | LIANG, Cong                           | (11) EP2914793                              |
| (22) 15.03.2019                          | WANG, Chuntao                         | (21) EP13851198.5                           |
| (54) LOCK FOR A DOOR                     | (31) 201610634119                     | (47) 07.07.2021                             |
| (73) dormakaba Deutschland GmbH          | (32) 03.08.2016                       | (87) US2013068187                           |
| (72) Roman, Hollstein                    | (33) China                            | 08.05.2014                                  |
| Michael, Suberg                          | (51) E05B 49/00                       | (22) 03.11.2013                             |
| Michael, Bruckert                        | B60R 25/00                            | (54) HOLD OPEN ROD LOCKING SLEEVE           |
| Christopher, Hecking                     | H01M 8/04029                          | (73) Hartwell Corporation                   |
| (31) 102018106830                        | H01M 8/04746                          | (72) ARTIN, Bo D.                           |
| (32) 22.03.2018                          | (11) EP3671924                        | (31) 201261722762 P                         |
| (33) Germany                             | (21) EP19206616.5                     | (32) 05.11.2012                             |
| (51) E05B 35/10                          | (47) 14.07.2021                       | (33) United States of America               |
| E05B 37/00                               | (22) 31.10.2019                       | (51) E05D 5/12                              |
| E05B 37/02                               | (54) VEHICLE AND CONTROL METHOD       | F16C 11/04                                  |
| E05B 37/10                               | (73) TOYOTA JIDOSHA KABUSHIKI KAISHA  | F16D 1/08                                   |
| E05B 67/24                               | (72) TANOUE, Hidetaka                 | (11) EP2815049                              |
| (11) EP2532812                           | NONAKA, Masato                        | (21) EP13705950.7                           |
| (21) EP12179284.0                        | (31) 2018229686                       | (47) 14.07.2021                             |
| (47) 07.07.2021                          | (32) 07.12.2018                       | (87) EP2013052437                           |
| (22) 09.04.2004                          | (33) Japan                            | 22.08.2013                                  |
| (54) Method of improving airline luggage | (51) E05B 67/38                       | (22) 07.02.2013                             |
| inspection                               | E05C 19/00                            | (54) HOUSEHOLD APPLIANCE WITH A             |
| (73) Tropp, David                        | E05C 19/18                            | DOOR LEAF BEARING ELEMENT                   |
| (72) Tropp, David                        | E05B 83/02                            | (73) BSH Hausgeräte GmbH                    |
| (31) 706500                              | (11) EP3559383                        | (72) RAAB, Alfred                           |
| 756531                                   | (21) EP17882716.8                     | SCHMID, Christian                           |
| (32) 12.11.2003                          | (47) 14.07.2021                       | SPILLER, Ralf                               |
| 12.01.2004                               | (87) DK2017050442                     | (31) 102012202440                           |
| (33) United States of America            | 28.06.2018                            | (32) 17.02.2012                             |
| United States of America                 | (22) 19.12.2017                       | (33) Germany                                |
| (51) E05B 47/00                          | (54) LOCKING SYSTEM AND USE           | (51) E05D 7/04                              |
| E05B 47/02                               | THEREOF                               | E05D 15/26                                  |
| (11) EP3384112                           | (73) Mavako APS                       | E05D 15/58                                  |
| (21) EP16871333.7                        | (72) KONGSHAMMER, Martin              | (11) EP2740870                              |
| (47) 07.07.2021                          | (31) PA201671050                      | (21) EP12195580.1                           |
| (87) US2016063901                        | PA201770692                           | (47) 14.07.2021                             |
| 08.06.2017                               | (32) 23.12.2016                       | (22) 05.12.2012                             |
| (22) 29.11.2016                          | 14.09.2017                            | (54) Guide device for sliding and rotatable |
| (54) ELECTRONIC LOCK WITH                | (33) Denmark                          | partition elements and functional unit      |
| MISALIGNMENT SCORING SYSTEM              | Denmark                               | (73) Hawa Sliding Solutions AG              |
| (73) Spectrum Brands, Inc.               | (51) E05B 77/36                       | (72) Haab, Gregor                           |
| (72) ALMOMANI, Nedat Akram               | E05B 77/40                            | Ettmüller, Peter                            |
| LOVETT, Matthew                          | E05B 83/18                            | Frei, Martin                                |
| BREWER, Timothy                          | E05B 85/26                            | Hagger, Stefan                              |
| (31) 201562261564 P                      | (11) EP3559382                        |                                             |
| 201615361621                             | (21) EP17821888.9                     | (51) E05D 7/082                             |
| (32) 01.12.2015                          | (47) 14.07.2021                       | E05D 7/085                                  |
| 28.11.2016                               | (87) EP2017083729                     | E05D 7/12                                   |
| (33) United States of America            | 28.06.2018                            | E05D 11/00                                  |
| United States of America                 | (22) 20.12.2017                       | E05F 1/12                                   |
| (51) E05B 47/00                          | (54) LOCK, PARTICULARLY FOR           | (11) EP3619387                              |
| E05B 47/06                               | BACKREST OR BOOT COMPARTMENT          | (21) EP18721808.6                           |
| E05C 3/24                                | (73) Witte Automotive GmbH            | (47) 14.07.2021                             |
| (11) EP3495590                           | (72) GELLHAUS, Bernd                  | (87) EP2018061721                           |
| (21) EP17836323.0                        | WIEMANN, Matthias                     | 08.11.2018                                  |
| (47) 07.07.2021                          | JANSSEN, Thorsten                     | (22) 07.05.2018                             |
| (87) CN2017094606                        | AYDIN, Selcuk                         | (54) A HINGE FOR A WINDOW, A WINDOW         |
| 08.02.2018                               | (31) 102016225993                     | INCLUDING A SET OF SUCH HINGES,             |
| (22) 27.07.2017                          | 102017205656                          | AND A METHOD OF INSTALLING                  |
| (54) AN ELECTRONIC LOCK, A METHOD        | (32) 22.12.2016                       | SUCH A WINDOW                               |
| FOR CONTROLLING AN ELECTRONIC            | 03.04.2017                            | (73) VKR Holding A/S                        |
|                                          |                                       | (72) ØHLENSCHLÆGER, Terkel                  |
|                                          |                                       | HOLM, Michael Galsgård                      |

|                                            |                                              |                                          |
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| TOBIAS, Esben Nordstrøm                    | 0754101                                      | (11) EP3511507                           |
| (31) PA201770314                           | (32) 10.05.2006                              | (21) EP18151138.7                        |
| 17173577                                   | 28.03.2007                                   | (47) 07.07.2021                          |
| (32) 05.05.2017                            | (33) France                                  | (22) 11.01.2018                          |
| 30.05.2017                                 | France                                       | (54) COMPOUND GLASS PANEL AND            |
| (33) Denmark                               | (51) E05F 15/643                             | METHOD FOR PRODUCING SAME                |
| European Patent Office (EPO)               | E05F 15/646                                  | (73) Prowerb AG                          |
| (51) E05D 7/12                             | (11) EP2546447                               | (72) Mäder, Hans Rudolf                  |
| E05D 15/40                                 | (21) EP12275073.0                            | (51) E06B 3/72                           |
| E05F 1/10                                  | (47) 07.07.2021                              | (11) EP2754836                           |
| (11) EP3289158                             | (22) 22.05.2012                              | (21) EP13005879.5                        |
| (21) EP16720789.3                          | (54) A motor vehicle with a sliding door and | (47) 07.07.2021                          |
| (47) 07.07.2021                            | an actuation mechanism for the sliding       | (22) 17.12.2013                          |
| (87) EP2016059385                          | door                                         | (54) HOUSE DOOR WING WITH SNAP           |
| 03.11.2016                                 | (73) Ford Global Technologies, LLC           | CONNECTION                               |
| (22) 27.04.2016                            | (72) Sargeant, Heath                         | (73) Obuk Haustürrüllungen GmbH & Co. KG |
| (54) HINGE FOR FURNITURE LEAVES            | Ginn, David                                  | (72) Althaus, Thomas                     |
| THAT SWING ABOUT AT LEAST ONE              | Richardson, Rob                              | (31) 202013000307 U                      |
| HORIZONTAL AXIS                            | (31) 201111852                               | (32) 12.01.2013                          |
| (73) Arturo Salice S.p.A.                  | (32) 11.07.2011                              | (33) Germany                             |
| (72) SALICE, Luciano                       | (33) United Kingdom                          | (51) E06B 3/964                          |
| (31) MI20150618                            | (51) E06B 3/22                               | E06B 3/968                               |
| (32) 30.04.2015                            | E06B 7/02                                    | E06B 3/976                               |
| (33) Italy                                 | (11) EP3643867                               | E06B 3/98                                |
| (51) E05F 1/10                             | (21) EP19205255.3                            | (11) EP3660258                           |
| F16F 1/02                                  | (47) 07.07.2021                              | (21) EP19386012.9                        |
| E05F 15/622                                | (22) 25.10.2019                              | (47) 14.07.2021                          |
| (11) EP3702638                             | (54) FRAME FOR DOORS AND WINDOWS             | (22) 14.03.2019                          |
| (21) EP19159435.7                          | WITH ADDITIONAL COMPONENTS                   | (54) INTERLOCK CORNER WITH               |
| (47) 14.07.2021                            | (73) Veka AG                                 | PRETENSIONER FOR ALUMINIUM               |
| (22) 26.02.2019                            | (72) Kalverkamp, Philipp                     | FRAMES                                   |
| (54) ACTUATOR FOR OPENING AND              | Drees, Ulrich                                | (73) SEU PLASTICS ONE MAN L.L.C.         |
| CLOSING A DOOR OR A TAILGATE OF            | (31) 102018126659                            | (72) Mylonas, Alexandros                 |
| A CAR                                      | (32) 25.10.2018                              | (31) 20180100543                         |
| (73) NV Bekaert SA                         | (33) Germany                                 | (32) 30.11.2018                          |
| (72) CARDON, Olivier                       | (51) E06B 3/36                               | (33) Greece                              |
| VERMEERSCH, Vincent                        | E06B 5/16                                    | (51) E06B 7/02                           |
| VAN DE VELDE, Johan                        | (11) EP3293342                               | E06B 7/12                                |
| GHEKIERE, Pieter                           | (21) EP16789351.0                            | (11) EP3658733                           |
| VAN HAVER, Wim                             | (47) 14.07.2021                              | (21) EP18750360.2                        |
| (51) E05F 3/12                             | (87) ES2016000057                            | (47) 07.07.2021                          |
| E05F 5/10                                  | 10.11.2016                                   | (87) EP2018069972                        |
| E05F 5/00                                  | (22) 22.04.2016                              | 31.01.2019                               |
| (11) EP3645818                             | (54) ADJUSTABLE CENTRAL CONNECTOR            | (22) 24.07.2018                          |
| (21) EP18735233.1                          | FOR TWO-LEAF DOUBLE FIRE                     | (54) BUILDING FACADE SYSTEM HAVING       |
| (47) 07.07.2021                            | DOORS                                        | HYGROSCOPIC AND AUTO-REACTIVE            |
| (87) EP2018066770                          | (73) Puertas Padilla, S.L.                   | DEHUMIDIFICATION MECHANISM               |
| 03.01.2019                                 | (72) PADILLA PEDREÑO, Ginés                  | (73) Technische Universität München      |
| (22) 22.06.2018                            | (31) 201530605                               | (72) REIFER, Michael                     |
| (54) DAMPER                                | (32) 04.05.2015                              | MOLTER, Philipp                          |
| (73) Druck- und Spritzgußwerk Hettich GmbH | (33) Spain                                   | INGRISCH, Johannes                       |
| & Co. KG                                   | (51) E06B 3/62                               | ARESTA, Claudio                          |
| (72) WEBER, Konrad                         | E06B 7/23                                    | AUER, Thomas                             |
| (31) 102017114475                          | (11) EP3633132                               | KLEIN, Tillmann                          |
| (32) 29.06.2017                            | (21) EP19200390.3                            | (31) 202017104406 U                      |
| (33) Germany                               | (47) 07.07.2021                              | (32) 24.07.2017                          |
| (51) E05F 15/614                           | (22) 30.09.2019                              | (33) Germany                             |
| (11) EP2016250                             | (54) METHOD FOR MANUFACTURING A              | (51) E06B 9/171                          |
| (21) EP07766023.1                          | SEAL FOR WINDOWS, DOORS OR                   | (11) EP3611328                           |
| (47) 07.07.2021                            | FACADES AND FOR MOUNTING THE                 | (21) EP19020451.1                        |
| (87) FR2007051243                          | SEAL ON THE DOOR                             | (47) 07.07.2021                          |
| 15.11.2007                                 | (73) IEB Gummitechnik Eisele & Co. GmbH      | (22) 01.08.2019                          |
| (22) 10.05.2007                            | (72) KLEINER, Kristof                        | (54) TELESCOPIC AXLE COVER               |
| (54) MOTORISED HINGE MECHANISM             | (31) 102018124170                            | (73) ROMA KG                             |
| (73) Mantion                               | (32) 01.10.2018                              | (72) Maier, Wilfried                     |
| (72) GONCALVES MONTEIRO, Victor            | (33) Germany                                 | (31) 102018006498                        |
| PELAMOURGUE, Guy                           | (51) E06B 3/663                              | (32) 17.08.2018                          |
| (31) 0604137                               |                                              |                                          |

|                                       |                                         |                                           |
|---------------------------------------|-----------------------------------------|-------------------------------------------|
| (33) Germany                          | 24.01.2019                              | (51) E21B 4/02                            |
| (51) E06B 9/24                        | (22) 17.07.2018                         | E21B 7/06                                 |
| G02F 1/163                            | (54) DRILL BIT WITH DETACHABLE BIT      | (11) EP3656969                            |
| G05B 15/02                            | HEAD                                    | (21) EP19218347.3                         |
| G06F 9/54                             | (73) Mincon International Limited       | (47) 14.07.2021                           |
| G06Q 50/10                            | (72) PURCELL, Joseph                    | (22) 29.12.2014                           |
| G06F 17/00                            | PURCELL, Ciaran                         | (54) DRILLING ASSEMBLY HAVING A           |
| (11) EP3230943                        | (31) S20170150                          | TILTED OR OFFSET DRIVESHAFT               |
| (21) EP15868003.3                     | S20180049                               | (73) Halliburton Energy Services, Inc.    |
| (47) 07.07.2021                       | (32) 20.07.2017                         | (72) SAVAGE, John Keith                   |
| (87) US2015064555                     | 08.03.2018                              | JONES, Stephen                            |
| 16.06.2016                            | (33) Ireland                            | (51) E21B 10/02                           |
| (22) 08.12.2015                       | Ireland                                 | E21B 25/00                                |
| (54) MULTIPLE INTERACTING SYSTEMS AT  | (51) E21B 1/02                          | (11) EP3517727                            |
| A SITE                                | E21C 27/20                              | (21) EP18153204.5                         |
| (73) View, Inc.                       | F16B 37/00                              | (47) 14.07.2021                           |
| (72) SHRIVASTAVA, Dhairya             | F16B 37/04                              | (22) 24.01.2018                           |
| BROWN, Stephen C.                     | F16B 37/12                              | (54) CORE-DRILLING TOOL                   |
| CADET, Ronald F.                      | (11) EP3176447                          | (73) BAUER Maschinen GmbH                 |
| (31) 201462088943 P                   | (21) EP15197673.5                       | (72) BRAUN, Roland Arthur                 |
| (32) 08.12.2014                       | (47) 07.07.2021                         | STOHL, Michael                            |
| (33) United States of America         | (22) 02.12.2015                         | DENK, Fabian                              |
| (51) E06B 9/72                        | (54) ROCK DRILLING MACHINE WITH         | Bachhuber, Stefan                         |
| (11) EP3658735                        | A FASTENING ARRANGEMENT                 | (51) E21B 10/18                           |
| (21) EP18748886.1                     | COMPRISING A BLIND NUT                  | (11) EP3004516                            |
| (47) 14.07.2021                       | (73) Sandvik Mining and Construction Oy | (21) EP14804527.1                         |
| (87) EP2018070327                     | (72) MUUTTONEN, Timo                    | (47) 14.07.2021                           |
| 31.01.2019                            | KELA, Timo                              | (87) AU2014050051                         |
| (22) 26.07.2018                       | HIETAKARI, Teemu                        | 04.12.2014                                |
| (54) AUTONOMOUS ACTUATOR FOR          | KILLI, Jari                             | (22) 27.05.2014                           |
| DRIVING A SCREEN                      | (51) E21B 3/02                          | (54) DRILL BIT                            |
| (73) Somfy Activites SA               | E21B 21/02                              | (73) Hanns, David                         |
| (72) THUMEREL, Stéphane               | F16C 19/38                              | (72) Hanns, David                         |
| MEASSON, Ghislain                     | F16C 19/49                              | (31) 2013901881                           |
| MEYLAN, Alexandre                     | F16C 19/50                              | (32) 27.05.2013                           |
| (31) 1757168                          | F16C 25/08                              | (33) Australia                            |
| (32) 27.07.2017                       | F16C 33/60                              | (51) E21B 17/046                          |
| (33) France                           | (11) EP2256285                          | (11) EP3366878                            |
| (51) E06C 1/20                        | (21) EP10001469.5                       | (21) EP18157915.2                         |
| E06C 1/22                             | (47) 07.07.2021                         | (47) 14.07.2021                           |
| E06C 1/39                             | (22) 12.02.2010                         | (22) 21.02.2018                           |
| E06C 1/393                            | (54) Bearing arrangement for a drilling | (54) COUPLER WITH THREADED                |
| E06C 1/397                            | assembly                                | CONNECTION FOR PIPE HANDLER               |
| E06C 7/06                             | (73) Aktiebolaget SKF                   | (73) Weatherford Technology Holdings, LLC |
| E06C 7/14                             | (72) Derrer, Siegfried                  | (72) ZOUHAIR, Aicam                       |
| E06C 7/16                             | Kirsch, Reinhard                        | (31) 201715444016                         |
| E06C 7/18                             | Pickel, Edgar                           | (32) 27.02.2017                           |
| (11) EP3411556                        | (31) 09006942                           | (33) United States of America             |
| (21) EP17748238.7                     | (32) 25.05.2009                         | (51) E21B 17/05                           |
| (47) 14.07.2021                       | (33) European Patent Office (EPO)       | E21B 17/20                                |
| (87) US2017016430                     | (51) E21B 4/00                          | E21B 19/16                                |
| 10.08.2017                            | F16C 19/18                              | E21B 33/068                               |
| (22) 03.02.2017                       | F16C 19/54                              | E21B 41/00                                |
| (54) ELEVATED WORKING PLATFORM AND    | F16C 33/58                              | F16L 25/00                                |
| RELATED METHODS                       | F16C 33/60                              | F16L 27/00                                |
| (73) Little Giant Ladder Systems, LLC | (11) EP3535473                          | F17D 1/08                                 |
| (72) RUSSELL, Brian                   | (21) EP17867003.0                       | (11) EP3510236                            |
| MOSS, N. Ryan                         | (47) 14.07.2021                         | (21) EP17849746.7                         |
| (31) 201662291677 P                   | (87) US2017059666                       | (47) 14.07.2021                           |
| (32) 05.02.2016                       | 11.05.2018                              | (87) US2017051030                         |
| (33) United States of America         | (22) 02.11.2017                         | 15.03.2018                                |
| (51) E21B 1/00                        | (54) RADIAL BALL BEARING AND METHOD     | (22) 11.09.2017                           |
| E21B 4/14                             | (73) Rival Downhole Tools LC            | (54) FRAC FLOWLINE SYSTEM                 |
| E21B 10/36                            | (72) VON GYNZ-REKOWSKI, Gunther, HH     | (73) FMC Technologies, Inc.               |
| (11) EP3655614                        | HERBEN, William D.                      | (72) UNGCHUSRI, Tep                       |
| (21) EP18748868.9                     | (31) 201615344201                       | PURSLEY, Mike                             |
| (47) 07.07.2021                       | (32) 04.11.2016                         | ALBRIGHT, William                         |
| (87) EP2018069434                     | (33) United States of America           | COOK, James                               |

|                                                                                          |                                                |                                                                                                                     |
|------------------------------------------------------------------------------------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| OGG, Nathan                                                                              | E21B 34/14                                     | (54) Method for building a flow model associated with capillary pressure curves and/or relative permeability curves |
| (31) 201662385813 P                                                                      | (11) EP3607172                                 | (73) IFP Energies nouvelles                                                                                         |
| (32) 09.09.2016                                                                          | (21) EP18773671.5                              | (72) Fournier, Frédérique                                                                                           |
| (33) United States of America                                                            | (47) 07.07.2021                                | (31) 1004710                                                                                                        |
| (51) E21B 23/00                                                                          | (87) US2018034077                              | (32) 03.12.2010                                                                                                     |
| E21B 43/12                                                                               | 17.01.2019                                     | (33) France                                                                                                         |
| F04D 13/10                                                                               | (22) 23.05.2018                                | (51) E21C 27/24                                                                                                     |
| E21B 47/008                                                                              | (54) CAPTURED BALL VALVE MECHANISM             | E21D 9/10                                                                                                           |
| E21B 47/01                                                                               | (73) Parker-Hannifin Corporation               | (11) EP3204607                                                                                                      |
| (11) EP3022388                                                                           | (72) DUDZINSKI, Paul                           | (21) EP14781514.6                                                                                                   |
| (21) EP14747266.6                                                                        | CORNETT, Ken                                   | (47) 14.07.2021                                                                                                     |
| (47) 14.07.2021                                                                          | FUNKE, Daniel                                  | (87) EP2014071334                                                                                                   |
| (87) US2014047017                                                                        | (31) 201762531464 P                            | 14.04.2016                                                                                                          |
| 22.01.2015                                                                               | (32) 12.07.2017                                | (22) 06.10.2014                                                                                                     |
| (22) 17.07.2014                                                                          | (33) United States of America                  | (54) CUTTING APPARATUS                                                                                              |
| (54) FORWARD DEPLOYED SENSING ARRAY FOR AN ELECTRIC SUBMERSIBLE PUMP                     | (51) E21B 34/06                                | (73) Sandvik Intellectual Property AB                                                                               |
| (73) GE Oil & Gas Esp, Inc.                                                              | E21B 34/16                                     | (72) BRANDL, Erich                                                                                                  |
| (72) HUGHES, Michael Franklin                                                            | F16K 31/02                                     | EBNER, Bernhard                                                                                                     |
| HOYTE, Scott Mordin                                                                      | (11) EP3400368                                 | (51) F01B 1/08                                                                                                      |
| (31) 201313946374                                                                        | (21) EP16895675.3                              | F01B 7/16                                                                                                           |
| (32) 19.07.2013                                                                          | (47) 14.07.2021                                | F01B 9/02                                                                                                           |
| (33) United States of America                                                            | (87) US2016023810                              | (11) EP3631168                                                                                                      |
| (51) E21B 23/04                                                                          | 28.09.2017                                     | (21) EP17732494.4                                                                                                   |
| E21B 33/12                                                                               | (22) 23.03.2016                                | (47) 07.07.2021                                                                                                     |
| E21B 41/00                                                                               | (54) ELECTRIC SUB-SURFACE SAFETY VALVE (ESSSV) | (87) FR2017051267                                                                                                   |
| E21B 49/08                                                                               | (73) Halliburton Energy Services, Inc.         | 29.11.2018                                                                                                          |
| E21B 47/06                                                                               | (72) JOSEPH, Joseph Chakkungal                 | (22) 23.05.2017                                                                                                     |
| (11) EP3500723                                                                           | SCOTT, Bruce Edward                            | (54) INTERNAL COMBUSTION ENGINE                                                                                     |
| (21) EP17842037.8                                                                        | CLOW, Wesley Irvin                             | (73) PONS ENGINE                                                                                                    |
| (47) 07.07.2021                                                                          | BALASUBRAMANIAN, Aswin                         | (72) PONS, Jean Eugène                                                                                              |
| (87) US2017047070                                                                        | (51) E21B 43/24                                | (51) F01D 1/02                                                                                                      |
| 22.02.2018                                                                               | H05B 6/10                                      | F01D 25/00                                                                                                          |
| (22) 16.08.2017                                                                          | (11) EP3410822                                 | F01D 25/24                                                                                                          |
| (54) SYSTEMS AND TECHNIQUES FOR CONTROLLING AND MONITORING DOWNHOLE OPERATIONS IN A WELL | (21) EP18174936.7                              | F01K 7/20                                                                                                           |
| (73) Schlumberger Technology B.V.                                                        | (47) 07.07.2021                                | F01K 7/34                                                                                                           |
| (72) WANG, Chao                                                                          | (22) 29.05.2018                                | F01K 7/38                                                                                                           |
| BOST, Julien                                                                             | (54) ELECTROMAGNETIC INDUCTION HEATER          | (11) EP3553286                                                                                                      |
| NICOLAS, Vincent                                                                         | (73) McMillan-McGee Corp.                      | (21) EP17895566.2                                                                                                   |
| ULLRICH, Abbigail                                                                        | (72) DELOS REYES, Shiella                      | (47) 07.07.2021                                                                                                     |
| DU, Quangen                                                                              | MC GEE, Bruce C.W.                             | (87) JP2017004910                                                                                                   |
| (31) 201615242063                                                                        | NYARKO, David                                  | 16.08.2018                                                                                                          |
| (32) 19.08.2016                                                                          | REID, Edwin Walter                             | (22) 10.02.2017                                                                                                     |
| (33) United States of America                                                            | (31) 201762512148 P                            | (54) STEAM TURBINE, PARTITION MEMBER, AND METHOD FOR OPERATING STEAM TURBINE                                        |
| (51) E21B 33/072                                                                         | (32) 29.05.2017                                | (73) Mitsubishi Heavy Industries Compressor Corporation                                                             |
| E21B 33/076                                                                              | (33) United States of America                  | (72) KAWASHIMA, Hirokazu                                                                                            |
| E21B 33/08                                                                               | (51) E21B 43/25                                | (51) F01D 5/02                                                                                                      |
| (11) EP2494142                                                                           | F16K 17/04                                     | F01D 25/16                                                                                                          |
| (21) EP10827284.0                                                                        | (11) EP2694778                                 | F02B 37/10                                                                                                          |
| (47) 07.07.2021                                                                          | (21) EP12716509.0                              | F02C 6/12                                                                                                           |
| (87) US2010027468                                                                        | (47) 14.07.2021                                | F02C 7/06                                                                                                           |
| 05.05.2011                                                                               | (87) GB2012000326                              | F04D 29/056                                                                                                         |
| (22) 16.03.2010                                                                          | 11.10.2012                                     | F04D 29/059                                                                                                         |
| (54) SUBSEA GREASE SYSTEM AND METHOD OF OPERATING SAID SYSTEM                            | (22) 05.04.2012                                | (11) EP3333363                                                                                                      |
| (73) Oceaneering International, Inc.                                                     | (54) INJECTION DEVICE                          | (21) EP17205041.1                                                                                                   |
| (72) Crawford, Neil                                                                      | (73) TCO AS                                    | (47) 14.07.2021                                                                                                     |
| (31) 707422                                                                              | (72) WOODFORD, Keith Donald                    | (22) 01.12.2017                                                                                                     |
| 255051 P                                                                                 | (31) 201105873                                 | (54) TURBOCHARGER ASSEMBLY                                                                                          |
| (32) 17.02.2010                                                                          | (32) 07.04.2011                                | (73) Garrett Transportation I Inc.                                                                                  |
| 26.10.2009                                                                               | (33) United Kingdom                            | (72) TABACCHI, Luca                                                                                                 |
| (33) United States of America                                                            | (51) E21B 49/00                                | MERRITT, Shawn W.                                                                                                   |
| United States of America                                                                 | (11) EP2469021                                 | (31) 201615375622                                                                                                   |
| (51) E21B 34/00                                                                          | (21) EP11290536.9                              | (32) 12.12.2016                                                                                                     |
|                                                                                          | (47) 07.07.2021                                |                                                                                                                     |
|                                                                                          | (22) 24.11.2011                                |                                                                                                                     |

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| (33) United States of America          | (22) 02.02.2017                          | (21) EP19175487.8                        |
| (51) F01D 5/06                         | (54) STEAM TURBINE WITH ROTOR BLADE      | (47) 07.07.2021                          |
| F01D 5/30                              | (73) General Electric Company            | (22) 20.05.2019                          |
| (11) EP3219912                         | (72) HALLER, Brian Robert                | (54) AIRFOIL HAVING ANGLED TRAILING      |
| (21) EP17161194.0                      | (51) F01D 5/14                           | EDGE SLOTS                               |
| (47) 14.07.2021                        | F01D 5/22                                | (73) Raytheon Technologies Corporation   |
| (22) 15.03.2017                        | (11) EP3460187                           | (72) SPANGLER, Brandon W.                |
| (54) COVER PLATE, ROTOR ASSEMBLY,      | (21) EP18193086.8                        | TRACY, Kevin D.                          |
| AND GAS TURBINE                        | (47) 14.07.2021                          | MONGILLO, Dominic J., Jr.                |
| (73) Raytheon Technologies Corporation | (22) 07.09.2018                          | (31) 201862701024 P                      |
| (72) OREN, Nicholas Waters             | (54) BLADE FOR A TURBOMACHINE            | 201816052730                             |
| PORTER, Steven D.                      | (73) MTU Aero Engines AG                 | (32) 20.07.2018                          |
| (31) 201615070789                      | (72) Pernleitner, Martin                 | 02.08.2018                               |
| (32) 15.03.2016                        | Dopfer, Manfred                          | (33) United States of America            |
| (33) United States of America          | Theurich, Daniel                         | United States of America                 |
| (51) F01D 5/08                         | (31) 102017216620                        | (51) F01D 5/18                           |
| F01D 9/06                              | (32) 20.09.2017                          | (11) EP3179040                           |
| F02C 7/10                              | (33) Germany                             | (21) EP16199208.6                        |
| F02C 7/18                              | (51) F01D 5/14                           | (47) 14.07.2021                          |
| (11) EP3647542                         | F01D 5/28                                | (22) 16.11.2016                          |
| (21) EP19204521.9                      | (11) EP3394399                           | (54) COMPONENT FOR A GAS TURBINE         |
| (47) 07.07.2021                        | (21) EP16831500.0                        | ENGINE AND CORRESPONDING A               |
| (22) 22.10.2019                        | (47) 07.07.2021                          | METHOD OF MANUFACTURING A                |
| (54) INTERCOOLED TANGENTIAL AIR        | (87) FR2016053608                        | FILM-COOLED ARTICLE                      |
| INJECTOR FOR GAS TURBINE               | 29.06.2017                               | (73) Raytheon Technologies Corporation   |
| ENGINES                                | (22) 21.12.2016                          | The Penn State Research Foundation       |
| (73) Raytheon Technologies Corporation | (54) BLADE, ASSOCIATED FAN AND           | (72) LEWIS, Scott D.                     |
| (72) DIBENEDETTO, Enzo                 | TURBOJET ENGINE                          | LYNCH, Stephen                           |
| (31) 201816177991                      | (73) Safran Aircraft Engines             | HAYDT, Shane                             |
| (32) 01.11.2018                        | (72) POUZADOUX, Frédéric, Jean-Bernard   | (31) 201562258097 P                      |
| (33) United States of America          | BASSOT, Alain, Jacques, Michel           | (32) 20.11.2015                          |
| (51) F01D 5/14                         | GUIVARC'H, Jérémy                        | (33) United States of America            |
| F01D 5/16                              | ROMERO, Jean-Louis                       | (51) F01D 5/18                           |
| G06F 30/17                             | RUF, Thibault                            | F01D 5/22                                |
| (11) EP3686397                         | (31) 1563009                             | (11) EP3329099                           |
| (21) EP19219307.6                      | (32) 21.12.2015                          | (21) EP15899957.3                        |
| (47) 14.07.2021                        | (33) France                              | (47) 14.07.2021                          |
| (22) 23.12.2019                        | (51) F01D 5/18                           | (87) CN2015085745                        |
| (54) STACKING OF ROTOR BLADE           | (11) EP3401507                           | 09.02.2017                               |
| AEROFOIL SECTIONS TO ADJUST            | (21) EP18170527.8                        | (22) 31.07.2015                          |
| RESONANT FREQUENCIES                   | (47) 07.07.2021                          | (54) COOLING ARRANGEMENTS IN             |
| (73) Rolls-Royce plc                   | (22) 03.05.2018                          | TURBINE BLADES                           |
| (72) Rose, Martin                      | (54) AIRFOIL FOR A TURBINE               | (73) General Electric Company            |
| Marshall, Stuart                       | COMPRISING AN IMPINGEMENT                | (72) TAYLOR, Zachary James               |
| (31) 201900863                         | INSERT                                   | ZHOU, Ying                               |
| (32) 22.01.2019                        | (73) General Electric Company            | SURTI, Ankit Rajesh                      |
| (33) United Kingdom                    | (72) DUTTA, Sandip                       | MISTRY, Hiteshkumar Rameshchandra        |
| (51) F01D 5/14                         | WEBER, Joseph Antony                     | (51) F01D 5/18                           |
| F01D 5/18                              | LACY, Benjamin Paul                      | F01D 9/02                                |
| F01D 5/28                              | (31) 201715590512                        | F01D 9/06                                |
| (11) EP3323987                         | (32) 09.05.2017                          | F23R 3/00                                |
| (21) EP17202435.8                      | (33) United States of America            | (11) EP3652418                           |
| (47) 14.07.2021                        | (51) F01D 5/18                           | (21) EP18769067.2                        |
| (22) 17.11.2017                        | (11) EP3658751                           | (47) 14.07.2021                          |
| (54) AIRFOIL HAVING ENDWALL PANELS     | (21) EP18779293.2                        | (87) EP2018073090                        |
| AND CORRESPONDING GAS TURBINE          | (47) 07.07.2021                          | 07.03.2019                               |
| ENGINE                                 | (87) EP2018075288                        | (22) 28.08.2018                          |
| (73) Raytheon Technologies Corporation | 28.03.2019                               | (54) WALL OF A HOT GAS COMPONENT         |
| (72) SURACE, Raymond                   | (22) 19.09.2018                          | AND CORRESPONDING COMPONENT              |
| (31) 201615353885                      | (54) BLADE FOR A TURBINE BLADE           | (73) Siemens Energy Global GmbH & Co. KG |
| (32) 17.11.2016                        | (73) Siemens Energy Global GmbH & Co. KG | (72) HOHENSTEIN, Sebastian               |
| (33) United States of America          | (72) GROSS, Heinz-Jürgen                 | (31) 17188510                            |
| (51) F01D 5/14                         | (31) 102017216926                        | (32) 30.08.2017                          |
| F01D 5/22                              | (32) 25.09.2017                          | (33) European Patent Office (EPO)        |
| (11) EP3358134                         | (33) Germany                             | (51) F01D 5/18                           |
| (21) EP17154386.1                      | (51) F01D 5/18                           | F01D 9/02                                |
| (47) 14.07.2021                        | (11) EP3597857                           | F01D 25/12                               |
|                                        |                                          | B33Y 80/00                               |

|                                        |                                        |                                        |
|----------------------------------------|----------------------------------------|----------------------------------------|
| (11) EP3660269                         | (21) EP19211952.7                      | (51) F01D 11/00                        |
| (21) EP19211669.7                      | (47) 14.07.2021                        | F01D 11/02                             |
| (47) 14.07.2021                        | (22) 27.11.2019                        | F02C 7/28                              |
| (22) 26.11.2019                        | (54) INTER-COMPRESSOR FLOW DIVIDER     | F16J 15/08                             |
| (54) COOLED HOT GAS PATH               | PROFILING                              | F16J 15/46                             |
| COMPONENTS INCLUDING A                 | (73) Pratt & Whitney Canada Corp.      | F16J 15/48                             |
| PLURALITY OF NOZZLES AND               | (72) NICHOLS, Jason                    | (11) EP3679228                         |
| VENTURIES                              | TOWNSEND, Peter                        | (21) EP18778541.5                      |
| (73) General Electric Company          | VEITCH, Thomas                         | (47) 14.07.2021                        |
| (72) WIDENER, Stanley Kevin            | DUONG, Hien                            | (87) FR2018052150                      |
| (31) 201816205799                      | WATSON, Guilherme                      | 14.03.2019                             |
| (32) 30.11.2018                        | (31) 201816201255                      | (22) 03.09.2018                        |
| (33) United States of America          | (32) 27.11.2018                        | (54) TURBINE ASSEMBLY WITH RING        |
| (51) F01D 5/18                         | (33) United States of America          | SEGMENTS                               |
| F01D 9/06                              | (51) F01D 9/04                         | (73) Safran Aircraft Engines           |
| (11) EP3477054                         | F01D 17/10                             | (72) LAROCHE, Clément Raphaël          |
| (21) EP18202304.4                      | F01D 17/12                             | (31) 1758232                           |
| (47) 14.07.2021                        | F01D 17/14                             | (32) 06.09.2017                        |
| (22) 24.10.2018                        | F02C 6/08                              | (33) France                            |
| (54) AIRFOIL FOR A GAS TURBINE ENGINE  | F02C 9/18                              | (51) F01D 11/00                        |
| AND CORRESPONDING GAS TURBINE          | (11) EP3611358                         | F01D 25/24                             |
| ENGINE                                 | (21) EP19191815.0                      | F02C 7/28                              |
| (73) Raytheon Technologies Corporation | (47) 07.07.2021                        | F16J 15/08                             |
| (72) PROPHETER-HINCKLEY, Tracy A.      | (22) 14.08.2019                        | (11) EP3244021                         |
| CLUM, Carey                            | (54) BLEED VALVE ACTUATION SYSTEM      | (21) EP17167077.1                      |
| JENNINGS, Timothy J.                   | (73) Raytheon Technologies Corporation | (47) 14.07.2021                        |
| (31) 201715791464                      | (72) CATHERALL, Michael John Robert    | (22) 19.04.2017                        |
| (32) 24.10.2017                        | (31) 201816103175                      | (54) ENGINE COMPRISING A SEAL          |
| (33) United States of America          | (32) 14.08.2018                        | (73) Raytheon Technologies Corporation |
| (51) F01D 5/18                         | (33) United States of America          | (72) McLAUGHLIN, Brian C.              |
| F01D 9/06                              | (51) F01D 9/04                         | CLARK, Thomas E.                       |
| (11) EP3656986                         | F01D 25/24                             | MILLIGAN, Peter J.                     |
| (21) EP19211341.3                      | F04D 29/54                             | McDOWELL, Dairus Deylan                |
| (47) 14.07.2021                        | F04D 29/66                             | SCHWEITZER, Jaimie                     |
| (22) 25.11.2019                        | (11) EP2795068                         | DRAKE, Jeremy                          |
| (54) AIRFOIL, CORRESPONDING BAFFLE     | (21) EP12816729.3                      | HAYFORD, Richard K.                    |
| ASSEMBLY AND GAS TURBINE               | (47) 14.07.2021                        | (31) 201615137395                      |
| ENGINE                                 | (87) FR2012052991                      | (32) 25.04.2016                        |
| (73) Raytheon Technologies Corporation | 27.06.2013                             | (33) United States of America          |
| (72) SPANGLER, Brandon W.              | (22) 19.12.2012                        | (51) F01D 11/04                        |
| MONGILLO, Dominic J.                   | (54) TURBOMACHINE COMPRESSOR           | F01D 25/16                             |
| (31) 201816198906                      | GUIDE VANES ASSEMBLY                   | F01D 25/18                             |
| (32) 23.11.2018                        | (73) Safran Aircraft Engines           | F02C 7/28                              |
| (33) United States of America          | (72) AZALBERT, Roland                  | F16C 33/74                             |
| (51) F01D 5/30                         | LAFOND, Nicolas, Claude, Hervé         | (11) EP3232011                         |
| F01D 11/00                             | GUILMET, Damien                        | (21) EP17166339.6                      |
| F02C 7/28                              | (31) 1161911                           | (47) 14.07.2021                        |
| F02K 3/00                              | (32) 19.12.2011                        | (22) 12.04.2017                        |
| (11) EP2855855                         | (33) France                            | (54) HYDRODYNAMIC CARBON FACE          |
| (21) EP13796663.6                      | (51) F01D 9/06                         | SEAL PRESSURE BOOSTER                  |
| (47) 07.07.2021                        | F02C 6/08                              | (73) Raytheon Technologies Corporation |
| (87) US2013043361                      | F02C 7/00                              | (72) DUFFY, Kevin                      |
| 05.12.2013                             | F16L 51/02                             | KOVACIK, Ronald K.                     |
| (22) 30.05.2013                        | (11) EP3354857                         | WALKER, Brady                          |
| (54) LADDER SEAL SYSTEM FOR GAS        | (21) EP18152970.2                      | ARTILES, Antonio F.                    |
| TURBINE ENGINES                        | (47) 07.07.2021                        | (31) 201615096952                      |
| (73) Raytheon Technologies Corporation | (22) 23.01.2018                        | (32) 12.04.2016                        |
| (72) BOYINGTON, Kimberly, Pash         | (54) FLEXIBLE JOINTS ASSEMBLY WITH     | (33) United States of America          |
| (31) 201213485250                      | FLEXURE RODS                           | (51) F01D 11/08                        |
| (32) 31.05.2012                        | (73) Unison Industries LLC             | F01D 21/04                             |
| (33) United States of America          | (72) TAJIRI, Gordon                    | F01D 25/12                             |
| (51) F01D 9/04                         | KENWORTHY, Michael Thomas              | (11) EP3620616                         |
| F01D 9/06                              | JONNALAGADDA, Dattu GV                 | (21) EP19195664.8                      |
| F01D 25/16                             | BURDETTE, Jason Levi                   | (47) 14.07.2021                        |
| F01D 25/24                             | STEWART JR., Lonnie Ray                | (22) 05.09.2019                        |
| F04D 17/12                             | (31) 201715415109                      | (54) TURBINE SECTION WITH BOAS         |
| F04D 29/44                             | (32) 25.01.2017                        | COOLING AIR FLOW GUIDE                 |
| (11) EP3660272                         | (33) United States of America          | (73) Raytheon Technologies Corporation |



|                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (72) BLANEY, Ken F.<br>CLARK, Thomas E.<br>(31) 201816122431<br>(32) 05.09.2018<br>(33) United States of America                                                                                                                                                                                                                                                                                       | 29.11.2018<br>(22) 22.05.2018<br>(54) SYSTEM, DEVICE AND METHOD FOR<br>FROZEN PERIOD DETECTION IN<br>SENSOR DATASETS<br>(73) Siemens Energy Global GmbH & Co. KG<br>(72) HEDGE, Gauva<br>RAMANATH, Vinay<br>RIZVI KHALEELI, Asmi<br>(31) 17172258<br>(32) 22.05.2017<br>(33) European Patent Office (EPO)                                                                                                                                                           | (72) SAKAMOTO, Keigo<br>DAMMOTO, Yosuke<br>KATOU, Eigo<br>AKIYAMA, Yoji<br>SEIKE, Nariaki<br>YOSHIDA, Toyotaka<br>CHIBA, Takeru                                                                                                                                                                                                                                                                              |
| (51) F01D 11/08<br>F01D 25/24<br>(11) EP3271556<br>(21) EP16715017.6<br>(47) 07.07.2021<br>(87) FR2016050580<br>22.09.2016<br>(22) 16.03.2016<br>(54) ASSEMBLY OF TURBINE RINGS<br>COMPRISING SHROUDS MADE OF<br>CERAMIC COMPOSITE<br>(73) SAFRAN AIRCRAFT ENGINES<br>(72) GROLEAU, Claire<br>LEPRETRE, Gilles<br>VOLAND, Etienne<br>TESSON, Thierry<br>(31) 1552147<br>(32) 16.03.2015<br>(33) France | (51) F01D 17/08<br>F02K 1/64<br>G01L 19/14<br>G01L 23/24<br>G01L 23/26<br>G01M 15/14<br>(11) EP3671166<br>(21) EP19216138.8<br>(47) 14.07.2021<br>(22) 13.12.2019<br>(54) TOOL FOR MEASURING PRESSURE<br>COMPRISING A SHEATH FOR<br>INSTALLATION IN A VEIN OF AN<br>AIRCRAFT ENGINE<br>(73) AIRBUS OPERATIONS<br>(72) CATURLA, Jean-Pascal<br>DUPE, Nicolas<br>SORNIQUE, Olivier<br>(31) 1873077<br>(32) 17.12.2018<br>(33) France                                  | (51) F01D 21/00<br>G01N 21/954<br>G02B 23/24<br>G03B 37/00<br>(11) EP2761140<br>(21) EP12768727.5<br>(47) 07.07.2021<br>(87) EP2012004089<br>04.04.2013<br>(22) 28.09.2012<br>(54) ENDOSCOPY SYSTEM AND<br>CORRESPONDING METHOD FOR<br>EXAMINING GAS TURBINES<br>(73) Lufthansa Technik AG<br>(72) MÜLLER, Wolf<br>THIES, Michael<br>HÖRLYK, Carsten<br>(31) 102011114541<br>(32) 30.09.2011<br>(33) Germany |
| (51) F01D 11/08<br>F02C 7/00<br>F02C 7/28<br>(11) EP2890878<br>(21) EP13832139.3<br>(47) 14.07.2021<br>(87) US2013053882<br>06.03.2014<br>(22) 07.08.2013<br>(54) BLADE OUTER AIR SEAL<br>(73) Raytheon Technologies Corporation<br>(72) Romanov, Dmitriy A.<br>Pelletier, Brian R.<br>Keene, Russell E.<br>(31) 201213597745<br>(32) 29.08.2012<br>(33) United States of America                      | (51) F01D 17/10<br>F02B 37/18<br>F04D 27/02<br>F16K 3/24<br>F16K 3/26<br>F16K 31/06<br>F16K 37/00<br>(11) EP2971639<br>(21) EP14768313.0<br>(47) 14.07.2021<br>(87) US2014020657<br>25.09.2014<br>(22) 05.03.2014<br>(54) A WASTEGATE VALVE AND<br>TURBOCHARGER HAVING SAME<br>(73) Dayco IP Holdings, LLC<br>(72) MARKYVECH, Craig<br>MILLER, James<br>FLETCHER, David<br>GRAICHEN, Brian<br>(31) 201313838006<br>(32) 15.03.2013<br>(33) United States of America | (51) F01D 21/04<br>F01D 25/24<br>F04D 29/52<br>(11) EP3660282<br>(21) EP19211366.0<br>(47) 14.07.2021<br>(22) 25.11.2019<br>(54) CONTAINMENT SYSTEM FOR GAS<br>TURBINE ENGINE<br>(73) Honeywell International Inc.<br>(72) KASAL, Yathiraj<br>GOMUC, Reha<br>NAIK, Abhay<br>GODFREY, Donald G.<br>(31) 201816200946<br>(32) 27.11.2018<br>(33) United States of America                                      |
| (51) F01D 15/10<br>F01D 25/16<br>F02C 6/12<br>F02C 7/08<br>(11) EP3513043<br>(21) EP17771840.0<br>(47) 07.07.2021<br>(87) GB2017052692<br>22.03.2018<br>(22) 13.09.2017<br>(54) A RADIAL FLOW GAS TURBINE<br>GENERATOR<br>(73) Delta Motorsport Limited<br>(72) CARPENTER, Nicholas<br>HERRING, Scott<br>WILKSCH, Mark<br>(31) 201615491<br>(32) 13.09.2016<br>(33) United Kingdom                     | (51) F01D 17/16<br>F02B 37/24<br>F02B 39/00<br>F02C 6/12<br>(11) EP3591188<br>(21) EP19187361.1<br>(47) 14.07.2021<br>(22) 28.03.2016<br>(54) VARIABLE GEOMETRY<br>TURBOCHARGER<br>(73) Mitsubishi Heavy Industries Engine &<br>Turbocharger, Ltd.                                                                                                                                                                                                                  | (51) F01D 25/12<br>F02C 7/14<br>F02C 7/18<br>F28F 3/00<br>(11) EP3330495<br>(21) EP17204640.1<br>(47) 14.07.2021<br>(22) 30.11.2017<br>(54) METHOD FOR REDUCING<br>THERMALLY INDUCED STRESSES IN<br>A HEAT EXCHANGER<br>(73) Hamilton Sundstrand Corporation<br>(72) ELDER, James<br>(31) 201615365318<br>(32) 30.11.2016<br>(33) United States of America                                                   |
| (51) F01D 17/02<br>F01D 21/00<br>G05B 23/02<br>G06F 11/07<br>(11) EP3631637<br>(21) EP18724286.2<br>(47) 14.07.2021<br>(87) EP2018063366                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | (51) F01D 25/12<br>F02C 7/18<br>F02K 3/115<br>(11) EP3047118<br>(21) EP14784145.6<br>(47) 14.07.2021<br>(87) US2014056556<br>26.03.2015                                                                                                                                                                                                                                                                      |

|                                        |                                                |                                    |
|----------------------------------------|------------------------------------------------|------------------------------------|
| (22) 19.09.2014                        | (21) EP13731376.3                              | (54) SYSTEM FOR ENGINE VALVE       |
| (54) AVIATION BYPASS VALVE INCLUDING   | (47) 14.07.2021                                | ACTUATION COMPRISING LASH-         |
| A SHAPE MEMORY ALLOY MATERIAL          | (87) FR2013051221                              | PREVENTION VALVE ACTUATION         |
| (73) General Electric Company          | 05.12.2013                                     | MOTION                             |
| (72) DIAZ, Carlos, Enrique             | (22) 30.05.2013                                | (73) Jacobs Vehicle Systems, Inc.  |
| GERSTLER, William, Dwight              | (54) FLUID CIRCUIT IN A TURBINE ENGINE         | (72) YANG, Dong                    |
| STORAGE, Michael, Ralph                | (73) Safran Aircraft Engines                   | JO, Peter                          |
| (31) 201361880344 P                    | (72) MOTTET, Lauranne, Sophie                  | BALTRUCKI, Justin, D.              |
| 201314143233                           | POTEL, Nicolas                                 | (31) 201562234608 P                |
| (32) 20.09.2013                        | VERTENOEUIL, Philippe                          | (32) 29.09.2015                    |
| 30.12.2013                             | (31) 1255129                                   | (33) United States of America      |
| (33) United States of America          | (32) 01.06.2012                                | (51) F01L 1/18                     |
| United States of America               | (33) France                                    | F01L 1/20                          |
| (51) F01D 25/16                        | (51) F01D 25/24                                | F01L 13/00                         |
| F02C 7/06                              | F04D 25/04                                     | (11) EP3444451                     |
| (11) EP3580432                         | F04D 29/056                                    | (21) EP18186225.1                  |
| (21) EP18706797.0                      | F04D 29/62                                     | (47) 07.07.2021                    |
| (47) 07.07.2021                        | (11) EP3708844                                 | (22) 30.07.2018                    |
| (87) FR2018050287                      | (21) EP19161807.3                              | (54) POWER TRANSMISSION DEVICE FOR |
| 16.08.2018                             | (47) 07.07.2021                                | VARIABLE VALVETRAIN                |
| (22) 06.02.2018                        | (22) 11.03.2019                                | (73) MAN Truck & Bus SE            |
| (54) TURBOJET COMPRISING AN            | (54) TURBOCHARGER AND BEARING                  | (72) Bogdanski, Peter              |
| ARCHITECTURE OF BEARINGS               | HOUSING THEREFOR                               | (31) 102017118852                  |
| OPTIMISED TO SUPPORT A LOW-            | (73) BorgWarner Inc.                           | (32) 18.08.2017                    |
| PRESSURE SHAFT                         | (72) SCHAEFER, Wolfram                         | (33) Germany                       |
| (73) Safran Aircraft Engines           | RZEPKA, Grzegorz                               | (51) F01M 1/02                     |
| (72) BEAUJARD, Antoine, Jean-Philippe  | (51) F01D 25/28                                | F01M 1/16                          |
| BENYAMIN, Serge                        | F02B 39/14                                     | F16H 57/04                         |
| BOUDEBIZA, Tewfik                      | F02B 67/10                                     | (11) EP3362652                     |
| (31) 1700130                           | F02C 6/12                                      | (21) EP16767178.3                  |
| (32) 07.02.2017                        | (11) EP3317502                                 | (47) 14.07.2021                    |
| (33) France                            | (21) EP15813876.8                              | (87) EP2016071050                  |
| (51) F01D 25/18                        | (47) 14.07.2021                                | 20.04.2017                         |
| F01D 25/24                             | (87) EP2015081014                              | (22) 07.09.2016                    |
| (11) EP3255255                         | 05.01.2017                                     | (54) DELIVERY DEVICE FOR A MOTOR   |
| (21) EP17173426.2                      | (22) 22.12.2015                                | VEHICLE                            |
| (47) 07.07.2021                        | (54) A TURBOCHARGER UNIT                       | (73) Vitesco Technologies GmbH     |
| (22) 30.05.2017                        | (73) Volvo Truck Corporation                   | (72) BÖHM, Christian               |
| (54) GAS TURBINE ENGINE WITH           | (72) ERIKSSON, Pontus                          | (31) 102015219771                  |
| LUBRICATED SHAFT BEARING               | (31) PCT/EP2015/065148                         | (32) 13.10.2015                    |
| COMPARTMENT                            | (32) 02.07.2015                                | (33) Germany                       |
| (73) Raytheon Technologies Corporation | (33) World Intellectual Property Office (WIPO) | (51) F01N 1/00                     |
| (72) SNYDER, Ryan K.                   | (51) F01K 13/02                                | F01N 3/20                          |
| AVIS, Thomas Bruce                     | (11) EP3658754                                 | F01N 3/30                          |
| PARNIN, Francis                        | (21) EP18766136.8                              | F02M 35/08                         |
| (31) 201615170221                      | (47) 07.07.2021                                | F01N 13/00                         |
| (32) 01.06.2016                        | (87) EP2018072551                              | F01N 13/08                         |
| (33) United States of America          | 28.03.2019                                     | (11) EP3530897                     |
| (51) F01D 25/18                        | (22) 21.08.2018                                | (21) EP19158172.7                  |
| F01M 1/10                              | (54) METHOD FOR OPERATING A STEAM              | (47) 14.07.2021                    |
| F02C 7/00                              | TURBINE                                        | (22) 20.02.2019                    |
| F16N 39/06                             | (73) Siemens Energy Global GmbH & Co. KG       | (54) ASPIRATION SYSTEM FOR A WORK  |
| (11) EP3567227                         | (72) KOWALSKI, Matthias                        | VEHICLE                            |
| (21) EP19173338.5                      | SIEVERT, Roland                                | (73) CNH Industrial Belgium NV     |
| (47) 07.07.2021                        | (31) 17192398                                  | (72) Singh, Samrendra              |
| (22) 08.05.2019                        | (32) 21.09.2017                                | (31) 201815901966                  |
| (54) CENTRIFUGAL DEBRIS PRE-           | (33) European Patent Office (EPO)              | (32) 22.02.2018                    |
| SEPARATOR FOR TURBINE ENGINE           | (51) F01L 1/04                                 | (33) United States of America      |
| OIL FILTER                             | F01L 1/08                                      | (51) F01N 3/021                    |
| (73) Raytheon Technologies Corporation | F01L 1/22                                      | F01N 3/023                         |
| (72) STACHOWIAK, David Allen           | F01L 3/00                                      | F01N 9/00                          |
| (31) 201815973808                      | F01L 13/06                                     | F01N 11/00                         |
| (32) 08.05.2018                        | (11) EP3356656                                 | F02D 41/00                         |
| (33) United States of America          | (21) EP16852592.1                              | F02D 41/02                         |
| (51) F01D 25/20                        | (47) 07.07.2021                                | F02D 41/12                         |
| F02C 7/14                              | (87) US2016054437                              | F02D 41/14                         |
| F02C 7/224                             | 06.04.2017                                     | (11) EP3701133                     |
| (11) EP2855885                         | (22) 29.09.2016                                | (21) EP18800696.9                  |

|                                   |                                        |                                            |
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| (47) 14.07.2021                   | (47) 07.07.2021                        | (47) 07.07.2021                            |
| (87) FR2018052299                 | (87) JP2017035540                      | (22) 19.02.2020                            |
| 02.05.2019                        | 19.04.2018                             | (54) MOUNTING FOR AN EXHAUST               |
| (22) 21.09.2018                   | (22) 29.09.2017                        | EMISSION SYSTEM OF A MOTOR                 |
| (54) METHOD FOR ESTAMATING        | (54) GAS ENGINE SYSTEM                 | VEHICLE                                    |
| THE SOOT LOADING OF A             | (73) Kawasaki Jukogyo Kabushiki Kaisha | (73) TVS Motor Company Limited             |
| PARTICULATE FILTER OF AN          | (72) NONAKA, Yosuke                    | (72) SENTHILKUMAR, Bharaniram              |
| INTERNAL COMBUSTION ENGINE        | HORIE, Takashi                         | MANI, Boobalan                             |
| (73) PSA Automobiles SA           | HIGUCHI, Takafumi                      | KALIMUTHU, Saravanakumar                   |
| (72) FURIO VIZCAINO, Javier       | KIYOTAKI, Gen                          | (31) 201941010904                          |
| KARAGEORGIOU, Dimitrios           | NAKAI, Masato                          | (32) 20.03.2019                            |
| GOGO, Matthieu                    | (31) 2016201699                        | (33) India                                 |
| (31) 1759965                      | (32) 13.10.2016                        | (51) F01P 1/02                             |
| (32) 23.10.2017                   | (33) Japan                             | F01P 5/06                                  |
| (33) France                       | (51) F01N 3/10                         | F02F 1/04                                  |
| (51) F01N 3/023                   | F01N 3/20                              | F02F 7/00                                  |
| F01N 3/035                        | F01N 3/24                              | (11) EP3135889                             |
| F01N 3/20                         | F01N 3/36                              | (21) EP15782343.6                          |
| F01N 9/00                         | F02B 43/00                             | (47) 14.07.2021                            |
| (11) EP3341599                    | F02M 21/02                             | (87) JP2015062619                          |
| (21) EP16839709.9                 | (11) EP3527795                         | 29.10.2015                                 |
| (47) 07.07.2021                   | (21) EP17859789.4                      | (22) 24.04.2015                            |
| (87) SE2016050799                 | (47) 07.07.2021                        | (54) ENGINE                                |
| 02.03.2017                        | (87) JP2017030949                      | (73) Yamaha Motor Power Products Kabushiki |
| (22) 25.08.2016                   | 19.04.2018                             | Kaisha                                     |
| (54) METHOD AND EXHAUST TREATMENT | (22) 29.08.2017                        | (72) NISHI Kengo                           |
| SYSTEM FOR TREATMENT OF AN        | (54) GAS ENGINE SYSTEM                 | JINNOHARA Nobuo                            |
| EXHAUST GAS STREAM                | (73) Kawasaki Jukogyo Kabushiki Kaisha | TSUDA Shinya                               |
| (73) Scania CV AB                 | (72) NONAKA, Yosuke                    | (31) 2014091966                            |
| (72) NILSSON, Magnus              | HORIE, Takashi                         | (32) 25.04.2014                            |
| BIRGERSSON, Henrik                | HIGUCHI, Takafumi                      | (33) Japan                                 |
| (31) 1551108                      | KIYOTAKI, Gen                          | (51) F01P 3/02                             |
| (32) 27.08.2015                   | NAKAI, Masato                          | F01P 7/14                                  |
| (33) Sweden                       | (31) 2016201657                        | F01P 7/16                                  |
| (51) F01N 3/027                   | (32) 13.10.2016                        | G05D 23/13                                 |
| F01N 3/20                         | (33) Japan                             | G05D 23/19                                 |
| F01N 3/28                         | (51) F01N 3/20                         | (11) EP2864606                             |
| F01N 9/00                         | F01N 11/00                             | (21) EP13725999.0                          |
| F01N 11/00                        | (11) EP3688290                         | (47) 07.07.2021                            |
| G01K 7/16                         | (21) EP18773963.6                      | (87) EP2013061289                          |
| F01N 13/00                        | (47) 14.07.2021                        | 05.12.2013                                 |
| (11) EP3695105                    | (87) EP2018074703                      | (22) 31.05.2013                            |
| (21) EP18779580.2                 | 04.04.2019                             | (54) METHOD OF CONTROLLING                 |
| (47) 14.07.2021                   | (22) 13.09.2018                        | TEMPERATURE                                |
| (87) EP2018075290                 | (54) METHOD FOR OPERATING A            | (73) Jaguar Land Rover Limited             |
| 18.04.2019                        | CATALYST ARRANGEMENT OF AN             | (72) HUTCHINS, William                     |
| (22) 19.09.2018                   | INTERNAL COMBUSTION ENGINE             | BRISCOE, Stuart                            |
| (54) DEVICE AND METHOD FOR        | AND CATALYST ARRANGEMENT               | (31) 201209679                             |
| DETERMINING A HEATING             | (73) Vitesco Technologies GmbH         | (32) 31.05.2012                            |
| TEMPERATURE OF A HEATING          | (72) KOBAYASHI, Takayuki               | (33) United Kingdom                        |
| ELEMENT FOR AN ELECTRICALLY       | (31) 201715515                         | (51) F01P 3/02                             |
| HEATABLE CATALYTIC CONVERTER,     | (32) 26.09.2017                        | F02F 1/14                                  |
| AND MOTOR VEHICLE                 | (33) United Kingdom                    | (11) EP3239508                             |
| (73) Vitesco Technologies GmbH    | (51) F01N 13/08                        | (21) EP15873012.7                          |
| (72) WEIGL, Manfred               | (11) EP3567231                         | (47) 07.07.2021                            |
| HAFT, Gerhard                     | (21) EP19172243.8                      | (87) JP2015085709                          |
| (31) 102017218374                 | (47) 07.07.2021                        | 30.06.2016                                 |
| (32) 13.10.2017                   | (22) 02.05.2019                        | (22) 21.12.2015                            |
| (33) Germany                      | (54) EXHAUST PASSAGE DEPOSIT           | (54) DIVIDING COMPONENT OF COOLING         |
| (51) F01N 3/08                    | MITIGATION                             | WATER CHANNEL OF WATER JACKET,             |
| F01N 3/10                         | (73) Insitu, Inc.                      | INTERNAL COMBUSTION ENGINE,                |
| F01N 3/20                         | (72) PIERZ, Patrick Malachy            | AND AUTOMOBILE                             |
| F01N 3/24                         | (31) 201815974618                      | (73) Nichias Corporation                   |
| F01N 3/28                         | (32) 08.05.2018                        | (72) ARAKI, Yukari                         |
| F02B 43/00                        | (33) United States of America          | MUSHIGA, Kentaro                           |
| F02M 21/02                        | (51) F01N 13/18                        | KAWASAKI, Yoshihiro                        |
| (11) EP3527798                    | (11) EP3712399                         | FUJITA, Yoshifumi                          |
| (21) EP17860241.3                 | (21) EP20158272.3                      | (31) 2014258314                            |

|                                                                 |                                                                                                                                                   |                                                                  |
|-----------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
| (32) 22.12.2014                                                 | F02B 39/10                                                                                                                                        | (31) 201816768                                                   |
| (33) Japan                                                      | F02D 23/00                                                                                                                                        | (32) 15.10.2018                                                  |
| (51) F01P 3/20                                                  | F02D 41/00                                                                                                                                        | (33) United Kingdom                                              |
| F02B 39/00                                                      | F02D 41/06                                                                                                                                        | (51) F02C 3/10                                                   |
| (11) EP3124765                                                  | F02M 26/08                                                                                                                                        | F02K 3/062                                                       |
| (21) EP16179608.1                                               | (11) EP3303799                                                                                                                                    | (11) EP3284943                                                   |
| (47) 07.07.2021                                                 | (21) EP16723683.5                                                                                                                                 | (21) EP17186611.4                                                |
| (22) 15.07.2016                                                 | (47) 07.07.2021                                                                                                                                   | (47) 14.07.2021                                                  |
| (54) COOLING CONTROL DEVICE                                     | (87) EP2016059846                                                                                                                                 | (22) 17.08.2017                                                  |
| (73) Mitsubishi Jidosha Kogyo Kabushiki Kaisha                  | 08.12.2016                                                                                                                                        | (54) GAS GENERATOR BIFURCATING EXHAUST DUCT TO FREE TURBINE      |
| (72) MATSUDA, Seiji                                             | (22) 03.05.2016                                                                                                                                   | (73) Raytheon Technologies Corporation                           |
| OSHIMA, Hiroki                                                  | (54) METHOD AND CONTROL DEVICE FOR OPERATING A DRIVE DEVICE                                                                                       | (72) CHANDLER, Jesse M.                                          |
| HATA, Koji                                                      | (73) Volkswagen Aktiengesellschaft                                                                                                                | SUCIU, Gabriel L.                                                |
| YAMAMOTO, Takeshi                                               | (72) REBOHL, Thorsten                                                                                                                             | (31) 201615239086                                                |
| (31) 2015152037                                                 | CASSEBAUM, Oliver                                                                                                                                 | (32) 17.08.2016                                                  |
| (32) 31.07.2015                                                 | (31) 102015210079                                                                                                                                 | (33) United States of America                                    |
| (33) Japan                                                      | (32) 01.06.2015                                                                                                                                   | (51) F02C 6/00                                                   |
| (51) F01P 7/08                                                  | (33) Germany                                                                                                                                      | F02C 7/08                                                        |
| F16D 35/02                                                      | (51) F02B 37/24                                                                                                                                   | F02C 7/143                                                       |
| (11) EP3548723                                                  | F02B 39/16                                                                                                                                        | F25B 1/00                                                        |
| (21) EP17821812.9                                               | F02D 41/00                                                                                                                                        | (11) EP3283746                                                   |
| (47) 07.07.2021                                                 | F02D 41/14                                                                                                                                        | (21) EP16779722.4                                                |
| (87) EP2017081212                                               | F02D 41/24                                                                                                                                        | (47) 14.07.2021                                                  |
| 07.06.2018                                                      | F02D 43/02                                                                                                                                        | (87) IN2016050111                                                |
| (22) 01.12.2017                                                 | (11) EP2128408                                                                                                                                    | 20.10.2016                                                       |
| (54) COOLING SYSTEM FOR ENGINES WITH ELECTROMAGNETIC FAN CLUTCH | (21) EP09160949.5                                                                                                                                 | (22) 16.04.2016                                                  |
| (73) PIAGGIO & C. S.p.A.                                        | (47) 07.07.2021                                                                                                                                   | (54) NOVEL MULTILoop GAS TURBINE AND METHOD OF OPERATION THEREOF |
| (72) FRESCHI, Giacomo                                           | (22) 22.05.2009                                                                                                                                   | (73) Nostrum Energy Pte. Ltd.                                    |
| MATTEO PUCCIONI                                                 | (54) Method for calibrating an actuator system for a variable nozzle of a turbocharger and data processing apparatus for carrying out such method | Sane, Shrikishna Kashinath                                       |
| (31) 201600122636                                               | (73) Garrett Transportation I Inc.                                                                                                                | (72) SANE, Shrikishna Kashinath                                  |
| (32) 02.12.2016                                                 | (72) Padhye, Umesh V.                                                                                                                             | (31) 1595MU2015                                                  |
| (33) Italy                                                      | Ratke, Todd                                                                                                                                       | 201562248707 P                                                   |
| (51) F01P 7/16                                                  | Mackenzie, Scott                                                                                                                                  | (32) 17.04.2015                                                  |
| (11) EP3521582                                                  | (31) 129343                                                                                                                                       | 30.10.2015                                                       |
| (21) EP19152098.0                                               | (32) 29.05.2008                                                                                                                                   | (33) India                                                       |
| (47) 07.07.2021                                                 | (33) United States of America                                                                                                                     | United States of America                                         |
| (22) 16.01.2019                                                 | (51) F02B 51/04                                                                                                                                   | (51) F02C 6/08                                                   |
| (54) A CONNECTOR                                                | F02M 27/04                                                                                                                                        | F04D 27/02                                                       |
| (73) Ford Global Technologies, LLC                              | F23K 5/08                                                                                                                                         | (11) EP3561264                                                   |
| (72) LECK, Chris James                                          | H01F 5/02                                                                                                                                         | (21) EP19171598.6                                                |
| SCHOLTES, Duncan                                                | H01F 5/06                                                                                                                                         | (47) 07.07.2021                                                  |
| (31) 201801758                                                  | H01F 7/20                                                                                                                                         | (22) 29.04.2019                                                  |
| (32) 02.02.2018                                                 | (11) EP3585996                                                                                                                                    | (54) PASSIVE ACTIVE POPPET-TYPE BLEED VALVES                     |
| (33) United Kingdom                                             | (21) EP18710100.1                                                                                                                                 | (73) Hamilton Sundstrand Corporation                             |
| (51) F02B 21/00                                                 | (47) 07.07.2021                                                                                                                                   | (72) KELLY, Myles R.                                             |
| F02B 29/02                                                      | (87) FR2018050415                                                                                                                                 | ELDER, James                                                     |
| F02B 37/12                                                      | 30.08.2018                                                                                                                                        | (31) 201815965502                                                |
| F02D 41/00                                                      | (22) 22.02.2018                                                                                                                                   | (32) 27.04.2018                                                  |
| F02D 41/40                                                      | (54) DEVICE FOR REDUCING THE FUEL CONSUMPTION OF AN ENGINE                                                                                        | (33) United States of America                                    |
| (11) EP3387233                                                  | (73) Allemeersch, Jean Marc                                                                                                                       | (51) F02C 6/16                                                   |
| (21) EP15805199.5                                               | (72) Allemeersch, Jean Marc                                                                                                                       | F04B 39/00                                                       |
| (47) 14.07.2021                                                 | (31) 17305201                                                                                                                                     | F04B 39/06                                                       |
| (87) EP2015078859                                               | (32) 24.02.2017                                                                                                                                   | F04B 41/02                                                       |
| 15.06.2017                                                      | (33) European Patent Office (EPO)                                                                                                                 | F04B 43/02                                                       |
| (22) 07.12.2015                                                 | (51) F02B 67/06                                                                                                                                   | F17C 1/00                                                        |
| (54) INTERNAL COMBUSTION ENGINE                                 | F16H 55/36                                                                                                                                        | (11) EP3380774                                                   |
| (73) Volvo Truck Corporation                                    | (11) EP3640448                                                                                                                                    | (21) EP16867495.0                                                |
| (72) SVENSSON, Stig Arne                                        | (21) EP19201642.6                                                                                                                                 | (47) 14.07.2021                                                  |
| LANGERVIK, Lennart                                              | (47) 07.07.2021                                                                                                                                   | (87) CA2016051395                                                |
| JACOBSSON, Björn                                                | (22) 07.10.2019                                                                                                                                   | 01.06.2017                                                       |
| HUGGARE, Viktor                                                 | (54) SELF-ALIGNING BELT PULLEY                                                                                                                    | (22) 25.11.2016                                                  |
| LASSESSON, Bengt                                                | (73) AGCO International GmbH                                                                                                                      | (54) VARIABLE PRESSURE VESSEL                                    |
| (51) F02B 37/10                                                 | (72) BRIAND, David                                                                                                                                | (73) Isocurrent Energy Incorporated                              |
| F02B 37/16                                                      |                                                                                                                                                   | (72) KARAMANEV, Dimitre                                          |

|                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (31) 201562260240 P<br>201662274350 P<br>201662304297 P                                                                                                                                                                                                       | (31) 1151388<br>(32) 21.02.2011<br>(33) France                                                                                                                                                                                                                                   | (21) EP11726866.4<br>(47) 07.07.2021<br>(87) FR2011000300                                                                                                                                                                                                     |
| (32) 25.11.2015<br>03.01.2016<br>06.03.2016                                                                                                                                                                                                                   | (51) F02C 7/232<br>F23D 11/36<br>F23K 5/14<br>F23R 3/28                                                                                                                                                                                                                          | 15.12.2011<br>(22) 18.05.2011<br>(54) VALVE WITH A POSITION SENSOR                                                                                                                                                                                            |
| (33) United States of America<br>United States of America<br>United States of America                                                                                                                                                                         | (11) EP3465010<br>(21) EP17730877.2<br>(47) 14.07.2021<br>(87) FR2017051326                                                                                                                                                                                                      | (73) KSB S.A.S<br>(72) DUBOY, Dominique<br>AMAGAT, Christophe                                                                                                                                                                                                 |
| (51) F02C 7/22<br>F23R 3/28                                                                                                                                                                                                                                   | (21) EP17730877.2<br>(47) 14.07.2021<br>(87) FR2017051326                                                                                                                                                                                                                        | (31) 1002436<br>(32) 09.06.2010<br>(33) France                                                                                                                                                                                                                |
| (11) EP3183498<br>(21) EP15760219.4<br>(47) 07.07.2021<br>(87) FR2015052224                                                                                                                                                                                   | (22) 29.05.2017<br>(54) FUEL INJECTOR FOR TURBO-<br>MACHINE<br>(73) Safran Aircraft Engines<br>(72) CHABAILLE, Christophe<br>BISSEIERES, Antoine<br>MOTTET, Lauranne, Sophie                                                                                                     | (51) F02D 11/10<br>H02K 5/22<br>H02K 11/33<br>(11) EP3613972<br>(21) EP18465559.5<br>(47) 07.07.2021<br>(22) 21.08.2018<br>(54) DRIVE UNIT FOR AN ACTUATOR<br>(73) Vitesco Technologies GmbH<br>(72) Petca, Ovidiu Claudiu                                    |
| (54) CONNECTION DEVICE COMPRISING<br>SEVERAL CURVED CONCENTRIC<br>TUBES<br>(73) SAFRAN AIRCRAFT ENGINES<br>(72) CHABAILLE, Christophe<br>LOVAL, Sébastien<br>LELEU, Bénédicte                                                                                 | (31) 1654942<br>(32) 31.05.2016<br>(33) France<br>(51) F02C 7/24<br>F02K 1/34<br>F02K 1/82<br>G10K 11/168<br>G10K 11/175                                                                                                                                                         | (51) F02D 15/02<br>F02D 41/02<br>F02D 41/30<br>(11) EP3677762<br>(21) EP17923019.8<br>(47) 07.07.2021<br>(87) JP2017031059                                                                                                                                    |
| (31) 1457895<br>(32) 20.08.2014<br>(33) France                                                                                                                                                                                                                | (22) 25.02.2016<br>(22) 19.08.2015<br>(54) CONNECTION DEVICE COMPRISING<br>SEVERAL CURVED CONCENTRIC<br>TUBES<br>(73) SAFRAN AIRCRAFT ENGINES<br>(72) CHABAILLE, Christophe<br>LOVAL, Sébastien<br>LELEU, Bénédicte                                                              | 07.03.2019<br>(22) 30.08.2017<br>(54) CONTROL METHOD FOR INTERNAL<br>COMBUSTION DEVICE, AND<br>CONTROL DEVICE FOR INTERNAL<br>COMBUSTION ENGINE<br>(73) Nissan Motor Co., Ltd.<br>(72) SUZUKI, Kenji<br>ITOU, Tomoki<br>YAMADA, Yukiyo                        |
| (51) F02C 7/228<br>F02C 9/26<br>F23C 6/02<br>F23N 1/00<br>F23R 3/34                                                                                                                                                                                           | (11) EP2572093<br>(21) EP11725158.7<br>(47) 14.07.2021<br>(87) FR2011051062                                                                                                                                                                                                      | (22) 07.07.2021<br>(87) JP2017031059                                                                                                                                                                                                                          |
| (11) EP3698031<br>(21) EP19704203.9<br>(47) 07.07.2021<br>(87) EP2019051492                                                                                                                                                                                   | (22) 12.05.2011<br>(54) MULTI-LAYER ACOUSTIC TREATMENT<br>PANEL<br>(73) Safran Aircraft Engines<br>Centre National de la Recherche<br>Scientifique<br>Université Technologie de Compiègne-<br>UTC                                                                                | (22) 07.07.2021<br>(87) EP2019051492                                                                                                                                                                                                                          |
| (22) 22.01.2019<br>(54) METHOD FOR OPERATING A BURNER<br>ASSEMBLY, PREFERABLY OF A GAS<br>TURBINE<br>(73) Siemens Energy Global GmbH & Co. KG<br>(72) SCHMITZ, Udo<br>SEILER, Carsten<br>WYHNALEK, Stefan                                                     | (72) JULLIARD, Jacques, Michel, Albert<br>MARDJONO, Jacky, Novi<br>RIOU, Georges, Jean, Xavier<br>POIRIER, Benjamin, André, François<br>VILLE, Jean-Michel, Jean-François                                                                                                        | (22) 22.01.2019<br>(54) METHOD FOR OPERATING A BURNER<br>ASSEMBLY, PREFERABLY OF A GAS<br>TURBINE<br>(73) Siemens Energy Global GmbH & Co. KG<br>(72) SCHMITZ, Udo<br>SEILER, Carsten<br>WYHNALEK, Stefan                                                     |
| (31) 102018202177<br>18169890<br>(32) 13.02.2018<br>27.04.2018<br>(33) Germany<br>European Patent Office (EPO)                                                                                                                                                | (31) 1053881<br>(32) 19.05.2010<br>(33) France<br>(51) F02C 7/36<br>F16H 57/08<br>F16H 57/04                                                                                                                                                                                     | (22) 22.01.2019<br>(54) METHOD FOR OPERATING A BURNER<br>ASSEMBLY, PREFERABLY OF A GAS<br>TURBINE<br>(73) Siemens Energy Global GmbH & Co. KG<br>(72) SCHMITZ, Udo<br>SEILER, Carsten<br>WYHNALEK, Stefan                                                     |
| (51) F02C 7/228<br>F02C 9/28<br>F02C 9/34                                                                                                                                                                                                                     | (11) EP3599397<br>(21) EP19188233.1<br>(47) 07.07.2021<br>(22) 25.07.2019<br>(54) REDUCER OR DIFFERENTIAL TYPE<br>DEVICE FOR A TURBINE ENGINE OF<br>AN AIRCRAFT<br>(73) Safran Transmission Systems<br>(72) DI GIOVANNI, Jean-Charles, Michel,<br>Pierre<br>SIMON, Adrien, Louis | (22) 22.01.2019<br>(54) METHOD FOR OPERATING A BURNER<br>ASSEMBLY, PREFERABLY OF A GAS<br>TURBINE<br>(73) Siemens Energy Global GmbH & Co. KG<br>(72) SCHMITZ, Udo<br>SEILER, Carsten<br>WYHNALEK, Stefan                                                     |
| (11) EP2678542<br>(21) EP12709928.1<br>(47) 14.07.2021<br>(87) FR2012050345                                                                                                                                                                                   | (22) 25.07.2019<br>(54) REDUCER OR DIFFERENTIAL TYPE<br>DEVICE FOR A TURBINE ENGINE OF<br>AN AIRCRAFT<br>(73) Safran Transmission Systems<br>(72) DI GIOVANNI, Jean-Charles, Michel,<br>Pierre<br>SIMON, Adrien, Louis                                                           | (22) 25.07.2019<br>(54) REDUCER OR DIFFERENTIAL TYPE<br>DEVICE FOR A TURBINE ENGINE OF<br>AN AIRCRAFT<br>(73) Safran Transmission Systems<br>(72) DI GIOVANNI, Jean-Charles, Michel,<br>Pierre<br>SIMON, Adrien, Louis                                        |
| (22) 30.08.2012<br>(22) 17.02.2012<br>(54) TURBOMACHINE COMPRISING A<br>PRIVILEGED INJECTION DEVICE<br>AND CORRESPONDING INJECTION<br>METHOD<br>(73) Safran Helicopter Engines<br>(72) ROYER, Eric<br>BENEZECH, Philippe, Jean, René, Marie<br>RUPERT, Pascal | (31) 1856983<br>(32) 26.07.2018<br>(33) France<br>(51) F02D 9/10<br>F16K 37/00<br>(11) EP2580508                                                                                                                                                                                 | (22) 30.08.2012<br>(22) 17.02.2012<br>(54) TURBOMACHINE COMPRISING A<br>PRIVILEGED INJECTION DEVICE<br>AND CORRESPONDING INJECTION<br>METHOD<br>(73) Safran Helicopter Engines<br>(72) ROYER, Eric<br>BENEZECH, Philippe, Jean, René, Marie<br>RUPERT, Pascal |
|                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                  | (51) F02D 29/02<br>F02N 11/04<br>F02N 11/08<br>H02K 7/14<br>H02K 21/22<br>H02K 29/12<br>F02N 19/00                                                                                                                                                            |

|                                        |                                     |                                 |
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| H02K 11/04                             | Wodausch, Jens                      | (21) EP10739330.8               |
| H02P 21/32                             | Arenz, Christian                    | (47) 07.07.2021                 |
| (11) EP3064762                         | (31) 102018112731                   | (87) EP2010060691               |
| (21) EP14870978.5                      | (32) 28.05.2018                     | 03.03.2011                      |
| (47) 07.07.2021                        | (33) Germany                        | (22) 23.07.2010                 |
| (87) JP2014083593                      | (51) F02D 41/06                     | (54) METHOD AND CONTROLLER FOR  |
| 25.06.2015                             | F02D 41/30                          | OPERATING AN ELECTROMAGNETIC    |
| (22) 18.12.2014                        | F02D 43/04                          | ACTUATOR                        |
| (54) STRADDLED VEHICLE WITH ENGINE     | F02N 11/08                          | (73) Robert Bosch GmbH          |
| UNIT                                   | F02P 9/00                           | (72) JOOS, Klaus                |
| (73) Yamaha Hatsudoki Kabushiki Kaisha | F02N 19/00                          | SCHLUETER, Ruben                |
| (72) NISHIKAWA, Takahiro               | F02N 19/04                          | NEUBERG, Jens                   |
| HINO, Haruyoshi                        | (11) EP3569850                      | KEMMER, Helerson                |
| (31) 2013263309                        | (21) EP19172348.5                   | RAPP, Holger                    |
| 2013263308                             | (47) 07.07.2021                     | HAMEDOVIC, Haris                |
| (32) 20.12.2013                        | (22) 02.05.2019                     | KOENIG, Joerg                   |
| 20.12.2013                             | (54) METHOD FOR REDUCING PARTICLE   | HOANG, Anh-Tuan                 |
| (33) Japan                             | EMISSIONS DURING A COLD START       | WICHERT, Bernd                  |
| Japan                                  | OF A COMBUSTION ENGINE              | FISCHER, Wolfgang               |
| (51) F02D 35/02                        | (73) VOLKSWAGEN                     | SEULING, Silke                  |
| G01L 9/00                              | AKTIENGESELLSCHAFT                  | HIRCHENHEIN, Achim              |
| G01L 11/02                             | (72) Sudschajew, David              | (31) 102010000872               |
| G01L 23/06                             | (31) 102018111738                   | 102009028829                    |
| G01M 15/08                             | (32) 16.05.2018                     | (32) 13.01.2010                 |
| (11) EP3535556                         | (33) Germany                        | 24.08.2009                      |
| (21) EP17822797.1                      | (51) F02D 41/14                     | (33) Germany                    |
| (47) 07.07.2021                        | (11) EP3244046                      | Germany                         |
| (87) NL2017050717                      | (21) EP17166140.8                   | (51) F02D 41/20                 |
| 11.05.2018                             | (47) 07.07.2021                     | F02D 41/38                      |
| (22) 07.11.2017                        | (22) 12.04.2017                     | F02D 41/40                      |
| (54) COMBUSTION PRESSURE SENSOR        | (54) CONTROL METHOD FOR A           | F02M 51/06                      |
| AND ITS ASSEMBLY IN AN ENGINE          | COMBUSTION ENGINE, CONTROL          | (11) EP3258091                  |
| COMPONENT OF AN INTERNAL               | DEVICE AND COMBUSTION ENGINE        | (21) EP17170353.1               |
| COMBUSTION ENGINE                      | (73) VOLKSWAGEN                     | (47) 14.07.2021                 |
| (73) Nooijen, Paul Johan Willem Maria  | AKTIENGESELLSCHAFT                  | (22) 10.05.2017                 |
| (72) Nooijen, Paul Johan Willem Maria  | (72) Segtrop, Benjamin              | (54) METHOD FOR OPERATING AN    |
| (31) 1042133                           | (31) 102016208236                   | ACTUATOR OF AN INJECTOR, AND A  |
| (32) 07.11.2016                        | (32) 12.05.2016                     | CORRESPONDING ACTUATOR          |
| (33) Netherlands                       | (33) Germany                        | (73) Robert Bosch GmbH          |
| (51) F02D 37/02                        | (51) F02D 41/18                     | (72) Rau, Andreas               |
| F02D 41/00                             | F02M 35/10                          | (31) 102016210812               |
| F02D 41/06                             | G01F 1/684                          | (32) 16.06.2016                 |
| F02N 3/02                              | G01F 5/00                           | (33) Germany                    |
| F02P 5/04                              | G01F 15/14                          | (51) F02D 41/22                 |
| F02P 5/15                              | G01F 15/18                          | F02D 41/38                      |
| (11) EP3608530                         | (11) EP3014226                      | F02M 59/34                      |
| (21) EP17904998.6                      | (21) EP14725081.5                   | F02M 59/36                      |
| (47) 14.07.2021                        | (47) 07.07.2021                     | F02M 63/00                      |
| (87) JP2017041221                      | (87) EP2014059767                   | F02M 63/02                      |
| 11.10.2018                             | 31.12.2014                          | (11) EP3298260                  |
| (22) 16.11.2017                        | (22) 13.05.2014                     | (21) EP16711138.4               |
| (54) ENGINE SYSTEM                     | (54) SENSOR FOR MESURING AT LEAST A | (47) 14.07.2021                 |
| (73) Honda Motor Co., Ltd.             | PROPERTY OF A FLUID FLOWING IN A    | (87) EP2016000468               |
| (72) YAMAMURA, Yoichi                  | CHANNEL                             | 24.11.2016                      |
| (31) 2017074714                        | (73) Robert Bosch GmbH              | (22) 16.03.2016                 |
| (32) 04.04.2017                        | (72) UNGER, Holger                  | (54) INJECTION SYSTEM FOR AN    |
| (33) Japan                             | KONZELMANN, Uwe                     | INTERNAL COMBUSTION ENGINE      |
| (51) F02D 41/00                        | WAGNER, Ulrich                      | AND INTERNAL COMBUSTION         |
| (11) EP3575581                         | EPPLER, Michael                     | ENGINE HAVING SUCH AN INJECTION |
| (21) EP19176067.7                      | SANCHO DE CASTRO, Manuel Blas       | SYSTEM                          |
| (47) 07.07.2021                        | SOMMER, Edda                        | (73) MTU Friedrichshafen GmbH   |
| (22) 23.05.2019                        | (31) 102013212162                   | (72) DÖLKER, Armin              |
| (54) METHOD FOR CONTROLLING A          | (32) 26.06.2013                     | (31) 102015209377               |
| CONTROL VALVE                          | (33) Germany                        | (32) 21.05.2015                 |
| (73) Volkswagen AG                     | (51) F02D 41/20                     | (33) Germany                    |
| (72) Brand, Michael                    | F02D 41/28                          | (51) F02D 41/38                 |
| Weddig, Silke                          | H01F 7/18                           | F02M 37/00                      |
| Fröhlich, Björn                        | (11) EP2470769                      | F02M 47/02                      |

|                                          |                                       |                                  |
|------------------------------------------|---------------------------------------|----------------------------------|
| F02M 63/00                               | (32) 31.07.2015                       | (33) France                      |
| F02M 63/02                               | (33) Japan                            | (51) F03B 13/00                  |
| (11) EP3642472                           | (51) F02M 59/36                       | H02J 7/00                        |
| (21) EP18728098.7                        | F02M 59/44                            | H02J 7/32                        |
| (47) 07.07.2021                          | F02M 59/46                            | H02J 7/34                        |
| (87) EP2018063886                        | F02M 63/00                            | B60L 53/50                       |
| 27.12.2018                               | (11) EP3252300                        | (11) EP3480915                   |
| (22) 28.05.2018                          | (21) EP16743050.3                     | (21) EP18204393.5                |
| (54) DEVICE AND METHOD FOR RETURN        | (47) 07.07.2021                       | (47) 07.07.2021                  |
| PRESSURE ADJUSTMENT FOR AN               | (87) JP2016050413                     | (22) 05.11.2018                  |
| INJECTOR                                 | 04.08.2016                            | (54) INSTALLATION FOR RECHARGING |
| (73) Robert Bosch GmbH                   | (22) 08.01.2016                       | ELECTRIC VEHICLES EQUIPPED       |
| (72) BATHA, Armin                        | (54) VALVE MECHANISM AND HIGH-        | WITH A TURBOGENERATOR            |
| (31) 102017210147                        | PRESSURE FUEL SUPPLY PUMP             | UTILISING FLUID DISTRIBUTION     |
| (32) 19.06.2017                          | PROVIDED WITH SAME                    | NETWORKS                         |
| (33) Germany                             | (73) Hitachi Automotive Systems, Ltd. | (73) Vanbaleghem, Marc           |
| (51) F02F 1/00                           | (72) AKIYAMA, Moritsugu               | Dewez, Stéphane                  |
| F02M 57/02                               | OMATA, Shigehiko                      | (72) VANBALEGHEM, Marc           |
| F02M 59/02                               | TAHARA, Shigenori                     | (31) 1760407                     |
| F04B 39/12                               | KOBAYASHI, Katsutoshi                 | (32) 06.11.2017                  |
| F16J 10/04                               | TOKUO, Kenichirou                     | (33) France                      |
| (11) EP3217008                           | (31) 2015011933                       | (51) F03B 13/26                  |
| (21) EP17159779.2                        | (32) 26.01.2015                       | F03G 3/02                        |
| (47) 14.07.2021                          | (33) Japan                            | (11) EP3619421                   |
| (22) 08.03.2017                          | (51) F02M 63/02                       | (21) EP18755702.0                |
| (54) INJECTION VALVE OF AN INTERNAL      | F02M 69/46                            | (47) 14.07.2021                  |
| COMBUSTION ENGINE                        | (11) EP3521611                        | (87) EP2018000351                |
| (73) MAN Energy Solutions, filial af MAN | (21) EP19152203.6                     | 11.04.2019                       |
| Energy Solutions SE, Tyskland            | (47) 07.07.2021                       | (22) 10.07.2018                  |
| (72) FLARUP, Johannes                    | (22) 17.01.2019                       | (54) AREA OF USE IN TIDAL        |
| (31) 201670136                           | (54) FUEL SUPPLY SYSTEM FOR ENGINE,   | MANIPULATION                     |
| (32) 09.03.2016                          | ENGINE, FUEL SUPPLY METHOD AND        | (73) Lombard, Peter Thomas       |
| (33) Denmark                             | COMPUTER PROGRAM PRODUCT              | (72) Lombard, Peter Thomas       |
| (51) F02K 1/72                           | (73) Mazda Motor Corporation          | (31) 201716923                   |
| (11) EP3029306                           | (72) Hirabayashi, Kazunori            | (32) 06.10.2017                  |
| (21) EP15197622.2                        | Shirai, Hirohisa                      | (33) United Kingdom              |
| (47) 07.07.2021                          | Komatsu, Hiroshi                      | (51) F03D 1/06                   |
| (22) 02.12.2015                          | Tagami, Shinichiro                    | (11) EP3212926                   |
| (54) GAS TURBINE ENGINE AND THRUST       | Sumimoto, Hiroshi                     | (21) EP15787638.4                |
| REVERSER ASSEMBLY THEREFOR               | (31) 2018016965                       | (47) 07.07.2021                  |
| (73) Raytheon Technologies Corporation   | (32) 02.02.2018                       | (87) EP2015075440                |
| (72) SAWYERS-ABBOTT, Nigel David         | (33) Japan                            | 06.05.2016                       |
| POWER, James                             | (51) F02M 65/00                       | (22) 02.11.2015                  |
| (31) 201462086439 P                      | G01M 15/04                            | (54) WIND TURBINE BLADE PROVIDED |
| (32) 02.12.2014                          | (11) EP3456953                        | WITH SURFACE MOUNTED DEVICE      |
| (33) United States of America            | (21) EP17190906.2                     | (73) LM WP Patent Holding A/S    |
| (51) F02M 55/00                          | (47) 14.07.2021                       | (72) LEHMANN MADSEN, Kristian    |
| F02M 55/04                               | (22) 13.09.2017                       | HØEG, Jesper                     |
| F02M 59/44                               | (54) APPARATUS AND METHOD FOR         | ANSHOLM RASMUSSEN, Kim           |
| F16B 2/08                                | TESTING A FUEL INJECTOR NOZZLE        | KILDEGAARD, Casper               |
| F16F 9/04                                | (73) Vitesco Technologies GmbH        | LAURSEN, Jens Ulrich             |
| F16F 15/023                              | (72) Gestri, Luca                     | (31) 201419389                   |
| (11) EP3330565                           | (51) F02M 65/00                       | (32) 31.10.2014                  |
| (21) EP16832883.9                        | G01M 15/04                            | (33) United Kingdom              |
| (47) 14.07.2021                          | G01M 15/09                            | (51) F03D 1/06                   |
| (87) JP2016072114                        | (11) EP3635241                        | (11) EP3601782                   |
| 09.02.2017                               | (21) EP18727010.3                     | (21) EP17712757.8                |
| (22) 28.07.2016                          | (47) 07.07.2021                       | (47) 14.07.2021                  |
| (54) DIAPHRAGM DAMPER DEVICE,            | (87) EP2018063842                     | (87) EP2017056717                |
| HOLDING MEMBER THEREFOR,                 | 06.12.2018                            | 27.09.2018                       |
| AND PRODUCTION METHOD FOR                | (22) 25.05.2018                       | (22) 21.03.2017                  |
| DIAPHRAGM DAMPER DEVICE                  | (54) MAINTENANCE SYSTEM               | (54) WIND TURBINE BLADE, WIND    |
| (73) Eagle Industry Co., Ltd.            | (73) Delphi Technologies IP Limited   | TURBINE ROTOR, AND WIND          |
| (72) IWA, Toshiaki                       | (72) FABER, Guillaume                 | TURBINE POWER GENERATING         |
| OGAWA, Yoshihiro                         | BELSOEUR, St phane                    | APPARATUS                        |
| FUJIWARA, Yasushi                        | (31) 1754808                          | (73) Vestas Offshore Wind A/S    |
| SATO, Yusuke                             | (32) 31.05.2017                       | (72) FUJIOKA, Hideyasu           |
| (31) 2015152620                          |                                       |                                  |

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|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------|
| HIRAISHI, Masayuki                                                            | Hemmelmann, Jan                                                                    | (32) 08.05.2015                                            |
| (51) F03D 3/04                                                                | (31) 970406                                                                        | (33) Japan                                                 |
| F03D 9/00                                                                     | (32) 16.12.2010                                                                    | (51) F04B 7/04                                             |
| F03D 9/11                                                                     | (33) United States of America                                                      | F04B 9/04                                                  |
| (11) EP3384155                                                                | (51) F03D 13/10                                                                    | F04B 19/00                                                 |
| (21) EP16826160.0                                                             | F03D 80/80                                                                         | (11) EP3732375                                             |
| (47) 07.07.2021                                                               | (11) EP3736441                                                                     | (21) EP18816097.2                                          |
| (87) IB2016057054                                                             | (21) EP19173543.0                                                                  | (47) 07.07.2021                                            |
| 01.06.2017                                                                    | (47) 14.07.2021                                                                    | (87) EP2018085336                                          |
| (22) 23.11.2016                                                               | (22) 09.05.2019                                                                    | 04.07.2019                                                 |
| (54) UNIT FOR SOLAR AND WIND ENERGY UTILISATION                               | (54) A METHOD FOR PRODUCING A WIND TURBINE, A NACELLE STRUCTURE AND A WIND TURBINE | (22) 17.12.2018                                            |
| (73) Piskorz, Waldemar                                                        | (73) Siemens Gamesa Renewable Energy A/S                                           | (54) MICROPUMP                                             |
| Piskorz, Tomasz Tadeusz                                                       | (72) Frydkjaer, John                                                               | (73) Sensile Medical AG                                    |
| Piskorz, Ireneusz                                                             | Rahn, Henrik                                                                       | (72) WYSS, Thomas                                          |
| (72) Piskorz, Waldemar                                                        | Svendsen, Kenneth                                                                  | PERRIER, Alexandre                                         |
| Piskorz, Tomasz Tadeusz                                                       |                                                                                    | HUBER, Christian                                           |
| Piskorz, Ireneusz                                                             |                                                                                    | MULLER, Matthias                                           |
| (31) 41492115                                                                 | (51) F03D 17/00                                                                    | (31) 17210840                                              |
| (32) 24.11.2015                                                               | (11) EP3631204                                                                     | (32) 28.12.2017                                            |
| (33) Poland                                                                   | (21) EP18728790.9                                                                  | (33) European Patent Office (EPO)                          |
| (51) F03D 3/06                                                                | (47) 14.07.2021                                                                    | (51) F04B 13/00                                            |
| H02K 7/18                                                                     | (87) DK2018050118                                                                  | F04B 43/02                                                 |
| H02K 16/00                                                                    | 29.11.2018                                                                         | F04B 53/06                                                 |
| H02K 19/18                                                                    | (22) 25.05.2018                                                                    | F04B 53/10                                                 |
| H02K 21/24                                                                    | (54) IMPROVEMENTS RELATING TO WIND TURBINE ROTOR ANGLE SENSING SYSTEMS             | (11) EP3557099                                             |
| H02K 39/00                                                                    | (73) Vestas Wind Systems A/S                                                       | (21) EP16924198.1                                          |
| F03D 9/25                                                                     | (72) CAPONETTI, Fabio                                                              | (47) 07.07.2021                                            |
| (11) EP3455922                                                                | KILB, Kristian                                                                     | (87) JP2016087053                                          |
| (21) EP17800196.2                                                             | HILTON, Dan                                                                        | 21.06.2018                                                 |
| (47) 14.07.2021                                                               | (31) PA201770385                                                                   | (22) 13.12.2016                                            |
| (87) US2017033400                                                             | (32) 26.05.2017                                                                    | (54) VALVE SEAT AND VALVE STRUCTURE                        |
| 23.11.2017                                                                    | (33) Denmark                                                                       | (73) Iwaki Co., Ltd.                                       |
| (22) 18.05.2017                                                               | (51) F03D 80/30                                                                    | (72) OGAWA Yoshio                                          |
| (54) PAIRS OF COMPLEMENTARY UNIDIRECTIONALLY MAGNETIC ROTOR/STATOR ASSEMBLIES | (11) EP3510282                                                                     | (51) F04B 17/03                                            |
| (73) Pacific International Energy Solutions Inc.                              | (21) EP17793612.7                                                                  | F04B 35/04                                                 |
| (72) STEVENS, Sunny Ouray                                                     | (47) 07.07.2021                                                                    | F04B 39/00                                                 |
| (31) 201662339439 P                                                           | (87) EP2017076682                                                                  | F04B 39/12                                                 |
| (32) 20.05.2016                                                               | 31.05.2018                                                                         | F04B 39/14                                                 |
| (33) United States of America                                                 | (22) 19.10.2017                                                                    | F04B 43/02                                                 |
| (51) F03D 7/02                                                                | (54) LIGHTNING RECEPTOR FOR A ROTOR BLADE OF A WIND TURBINE                        | F04B 43/04                                                 |
| (11) EP3633188                                                                | (73) Siemens Gamesa Renewable Energy A/S                                           | F04B 53/16                                                 |
| (21) EP18198368.5                                                             | (72) DAHL, Flemming                                                                | F04B 53/22                                                 |
| (47) 14.07.2021                                                               | TRUONG, Yannick Cao van                                                            | (11) EP3167190                                             |
| (22) 02.10.2018                                                               | (31) 102016223012                                                                  | (21) EP15819742.6                                          |
| (54) VARIABLE FLOW HYDRAULIC CIRCUIT FOR A WIND TURBINE                       | (32) 22.11.2016                                                                    | (47) 07.07.2021                                            |
| (73) Siemens Gamesa Renewable Energy A/S                                      | (33) Germany                                                                       | (87) US2015039536                                          |
| (72) Kristensen, Mikkel Aggersbjerg                                           | (51) F04B 1/22                                                                     | 14.01.2016                                                 |
| (51) F03D 7/02                                                                | F04B 1/0408                                                                        | (22) 08.07.2015                                            |
| H02K 7/11                                                                     | F04B 1/2078                                                                        | (54) METHOD FOR ATTACHING PUMPS TO ELECTRIC MOTORS         |
| H02K 7/18                                                                     | (11) EP3296568                                                                     | (73) Flow Control LLC.                                     |
| H02K 16/04                                                                    | (21) EP16792367.1                                                                  | (72) MEZA, Humberto V.                                     |
| H02K 17/42                                                                    | (47) 14.07.2021                                                                    | (31) 201462021755 P                                        |
| H02P 9/00                                                                     | (87) JP2016002244                                                                  | (32) 08.07.2014                                            |
| F03D 9/25                                                                     | 17.11.2016                                                                         | (33) United States of America                              |
| (11) EP2466123                                                                | (22) 02.05.2016                                                                    | (51) F04B 17/04                                            |
| (21) EP11192386.8                                                             | (54) PISTON, AND HYDRAULIC ROTATING MACHINE PROVIDED WITH SAME                     | F04B 53/00                                                 |
| (47) 14.07.2021                                                               | (73) Kawasaki Jukogyo Kabushiki Kaisha                                             | (11) EP3635253                                             |
| (22) 07.12.2011                                                               | (72) TAMASHIMA, Hideki                                                             | (21) EP18730124.7                                          |
| (54) Variable speed machine assembly and method for making the same           | MATSUHIRA, Koji                                                                    | (47) 07.07.2021                                            |
| (73) General Electric Company                                                 | ISHIHARA, Kazuhiro                                                                 | (87) IB2018053601                                          |
| (72) Waszak, Michal-Wolfgang                                                  | KAWASHIMA, Katsuyuki                                                               | 13.12.2018                                                 |
|                                                                               | (31) 2015095798                                                                    | (22) 22.05.2018                                            |
|                                                                               |                                                                                    | (54) HYDRAULIC, ELECTROMAGNETIC FLOATING-PISTON MOTOR PUMP |
|                                                                               |                                                                                    | (73) Ceme S.p.A.                                           |
|                                                                               |                                                                                    | (72) PALMIERI, Roberto                                     |
|                                                                               |                                                                                    | BENINI, Michele                                            |



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|------------------------------------|--------------------------------------------|---------------------------------------|
| (31) 201700060837                  | (33) United States of America              | (72) SISHTLA, Vishnu M.               |
| (32) 05.06.2017                    | (51) F04B 27/12                            | NIEFORTH, Scott A.                    |
| (33) Italy                         | F04B 39/10                                 | (31) 201762538490 P                   |
| (51) F04B 19/00                    | (11) EP3553315                             | (32) 28.07.2017                       |
| F04B 43/04                         | (21) EP17881648.4                          | (33) United States of America         |
| F04B 45/047                        | (47) 07.07.2021                            | (51) F04B 41/06                       |
| A24F 40/10                         | (87) JP2017044187                          | F04C 23/00                            |
| A24F 40/46                         | 21.06.2018                                 | F04C 25/02                            |
| A24F 40/48                         | (22) 08.12.2017                            | (11) EP3686430                        |
| A24F 40/485                        | (54) DISCHARGE VALVE STRUCTURE FOR         | (21) EP19217906.7                     |
| A24F 40/50                         | COMPRESSOR                                 | (47) 14.07.2021                       |
| (11) EP3629783                     | (73) Valeo Japan Co., Ltd.                 | (22) 19.12.2019                       |
| (21) EP18733950.2                  | (72) ISHIDA, Hiroyuki                      | (54) SYSTEM AND METHOD FOR            |
| (47) 14.07.2021                    | TAKAHASHI, Hideyuki                        | EVACUATING A PROCESS ROOM             |
| (87) IB2018053921                  | ENDO, Takayuki                             | (73) MAN Energy Solutions SE          |
| 06.12.2018                         | HE, Hao                                    | (72) BERMICH, Gunther                 |
| (22) 31.05.2018                    | (31) 2016240052                            | (31) 102019101769                     |
| (54) ELECTRONIC CIGARETTE FLUID    | (32) 12.12.2016                            | (32) 24.01.2019                       |
| PUMP                               | (33) Japan                                 | (33) Germany                          |
| (73) Fontem Holdings 1 B.V.        | (51) F04B 35/04                            | (51) F04B 43/02                       |
| (72) WENSLEY, Martin               | F04B 39/00                                 | F04B 43/04                            |
| KUBEL, Khe                         | F04B 39/12                                 | F04B 45/047                           |
| BIEL, Stefan                       | H02K 5/22                                  | F04B 53/10                            |
| BRINKERHOFF, Mark                  | (11) EP3587816                             | (11) EP3660308                        |
| GERATY, Tom                        | (21) EP18787893.9                          | (21) EP20152503.7                     |
| QUINTANA, Reynaldo                 | (47) 07.07.2021                            | (47) 14.07.2021                       |
| (31) 201762513865 P                | (87) JP2018016044                          | (22) 01.03.2013                       |
| (32) 01.06.2017                    | 25.10.2018                                 | (54) TWO-CAVITY DISC PUMP             |
| (33) United States of America      | (22) 18.04.2018                            | (73) 3M Innovative Properties Company |
| (51) F04B 27/02                    | (54) COMPRESSOR HAVING TERMINAL            | (72) LOCKE, Christopher, Brian        |
| F04B 39/00                         | PROTECTION STRUCTURE                       | TOUT, Aidan, Marcus                   |
| (11) EP3535494                     | (73) Daikin Industries, Ltd.               | (31) 201261607904 P                   |
| (21) EP17787329.6                  | (72) MIZUGUCHI, Tomoko                     | (32) 07.03.2012                       |
| (47) 07.07.2021                    | NAKAMURA, Souichi                          | (33) United States of America         |
| (87) EP2017001234                  | SUGIYAMA, Toru                             | (51) F04B 45/047                      |
| 11.05.2018                         | SHINOHARA, Yoshihiro                       | F16K 99/00                            |
| (22) 20.10.2017                    | KOJIMA, Kouji                              | (11) EP3203072                        |
| (54) RECIPROCATING-PISTON MACHINE, | KINOSHITA, Satomi                          | (21) EP16207273.0                     |
| COMPRESSED AIR SUPPLY SYSTEM,      | HARA, Kazuyuki                             | (47) 07.07.2021                       |
| VEHICLE WITH COMPRESSED AIR        | (31) 2017082517                            | (22) 29.12.2016                       |
| SUPPLY SYSTEM, METHOD OF           | (32) 19.04.2017                            | (54) MINIATURE PNEUMATIC DEVICE       |
| ASSEMBLY AND OPERATION OF A        | (33) Japan                                 | (73) Microjet Technology Co., Ltd     |
| RECIPROCATING-PISTON MACHINE       | (51) F04B 35/04                            | (72) Chen, Shih-Chang                 |
| (73) ZF CV Systems Europe BV       | H02K 33/06                                 | Huang, Chi-Feng                       |
| (72) BREDBECK, Klaus               | (11) EP2568586                             | Han, Yung-Lung                        |
| STABENOW, Uwe                      | (21) EP12183112.7                          | Liao, Jia-Yu                          |
| (31) 102016013454                  | (47) 07.07.2021                            | Chen, Shou-Hung                       |
| (32) 02.11.2016                    | (22) 05.09.2012                            | Huang, Che-Wei                        |
| (33) Germany                       | (54) Reciprocating motor and reciprocating | Liao, Hung-Hsin                       |
| (51) F04B 27/10                    | compressor having the same                 | Chen, Chao-Chih                       |
| F04B 27/12                         | (73) LG Electronics Inc.                   | Chen, Jheng-Wei                       |
| F04B 27/18                         | (72) Hong, Eonpyo                          | Chang, Ying-Lun                       |
| F04B 53/22                         | (31) 20110090317                           | Chang, Chia-Hao                       |
| (11) EP3488105                     | (32) 06.09.2011                            | Lee, Wei-Ming                         |
| (21) EP17754217.2                  | (33) Korea (Republic)                      | (31) 105102842                        |
| (47) 14.07.2021                    | (51) F04B 39/02                            | 105102843                             |
| (87) US2017043763                  | F04B 53/18                                 | 105102845                             |
| 01.02.2018                         | F16C 33/66                                 | 105119823                             |
| (22) 25.07.2017                    | F25B 1/053                                 | 105119824                             |
| (54) WOBBLE PLATE COMPRESSOR AND   | F25B 31/00                                 | 105119825                             |
| OXYGEN CONCENTRATOR USING          | (11) EP3658774                             | 105128578                             |
| THE SAME                           | (21) EP18753017.5                          | (32) 29.01.2016                       |
| (73) Caire Inc.                    | (47) 07.07.2021                            | 29.01.2016                            |
| (72) WINTER, David, Phillip        | (87) US2018044158                          | 29.01.2016                            |
| ALON, Raziell                      | 31.01.2019                                 | 24.06.2016                            |
| KOZLOW, Gary, Wayne                | (22) 27.07.2018                            | 24.06.2016                            |
| (31) 201662366408 P                | (54) LUBRICATION SUPPLY SYSTEM             | 24.06.2016                            |
| (32) 25.07.2016                    | (73) Carrier Corporation                   | 05.09.2016                            |

|                                       |                                      |                                         |
|---------------------------------------|--------------------------------------|-----------------------------------------|
| (33) Taiwan, Province of China        | (33) Korea (Republic)                | (51) F04D 1/06                          |
| Taiwan, Province of China             | (51) F04C 18/08                      | F04D 29/08                              |
| Taiwan, Province of China             | F04C 18/52                           | F04D 29/42                              |
| Taiwan, Province of China             | (11) EP3557063                       | F04D 29/62                              |
| Taiwan, Province of China             | (21) EP16923645.2                    | F16J 15/06                              |
| Taiwan, Province of China             | (47) 07.07.2021                      | (11) EP3029334                          |
| Taiwan, Province of China             | (87) JP2016087623                    | (21) EP15189338.5                       |
|                                       | 21.06.2018                           | (47) 07.07.2021                         |
| (51) F04B 47/06                       | (22) 16.12.2016                      | (22) 12.10.2015                         |
| (11) EP3397863                        | (54) SCREW COMPRESSOR                | (54) AXIALLY SPLIT PUMP                 |
| (21) EP16826602.1                     | (73) Mitsubishi Electric Corporation | (73) Sulzer Management AG               |
| (47) 07.07.2021                       | (72) ITO, Takeshi                    | (72) Welschinger, Thomas                |
| (87) US2016068634                     | (51) F04C 18/16                      | Tischler, Heike                         |
| 06.07.2017                            | F04C 23/00                           | Vogel, Berthold                         |
| (22) 27.12.2016                       | F04C 29/00                           | (31) 14196441                           |
| (54) LINEAR HYDRAULIC PUMP FOR        | F04C 29/02                           | (32) 05.12.2014                         |
| SUBMERSIBLE APPLICATIONS              | F04C 29/04                           | (33) European Patent Office (EPO)       |
| (73) Ge Oil & Gas Esp, Inc.           | (11) EP3516234                       | (51) F04D 13/06                         |
| (72) REEVES, Brian, Paul              | (21) EP17772361.6                    | F04D 29/42                              |
| COLLINS, Charles                      | (47) 07.07.2021                      | F04D 29/62                              |
| NOAKES, Aaron                         | (87) EP2017073546                    | (11) EP3667090                          |
| ROHLMAN, Eric, Joseph                 | 29.03.2018                           | (21) EP18212323.2                       |
| (31) 201514982936                     | (22) 19.09.2017                      | (47) 07.07.2021                         |
| (32) 29.12.2015                       | (54) SCREW COMPRESSOR FOR A          | (22) 13.12.2018                         |
| (33) United States of America         | UTILITY VEHICLE                      | (54) PUMP ASSEMBLY                      |
| (51) F04B 49/02                       | (73) KNORR-BREMSE Systeme für        | (73) Grundfos Holding A/S               |
| F04B 49/035                           | Nutzfahrzeuge GmbH                   | (72) Svarre, Erik Bundesen              |
| F04B 53/10                            | (72) HEBRARD, Gilles                 | Plougmann, Jan                          |
| (11) EP3670912                        | MARESCOT, Jean-Baptiste              | Damm, Therkel                           |
| (21) EP19209411.8                     | MELLAR, Jörg                         | Aarestrup, Jan Carøe                    |
| (47) 14.07.2021                       | WEINHOLD, Thomas                     | Vestergaard Kragelund, Klaus            |
| (22) 15.11.2019                       | (31) 102016011394                    | Liengaard Svarre, Morten                |
| (54) PRESSURE REGULATING BYPASS       | (32) 21.09.2016                      | (51) F04D 13/08                         |
| VALVE                                 | (33) Germany                         | H02K 5/02                               |
| (73) Tecomec S.r.l.                   | (51) F04C 18/16                      | H02K 5/12                               |
| (72) TONDELLI, Corrado                | F04C 28/12                           | H02K 5/128                              |
| ZEDIU, Paul Marius                    | (11) EP3080457                       | H02K 5/22                               |
| (31) 201800020233                     | (21) EP14824368.6                    | H02K 7/116                              |
| (32) 19.12.2018                       | (47) 14.07.2021                      | H02K 11/215                             |
| (33) Italy                            | (87) EP2014003343                    | (11) EP3673565                          |
| (51) F04C 2/107                       | 18.06.2015                           | (21) EP18759845.3                       |
| F04C 15/00                            | (22) 12.12.2014                      | (47) 14.07.2021                         |
| (11) EP3112682                        | (54) COMPRESSOR                      | (87) DE2018100689                       |
| (21) EP16163387.0                     | (73) GEA Refrigeration Germany GmbH  | 28.02.2019                              |
| (47) 07.07.2021                       | (72) MOSEMANN, Dieter                | (22) 07.08.2018                         |
| (22) 12.05.2014                       | NEUWIRTH, Ottomar                    | (54) PRESSURE INDEPENDENT ELECTRIC      |
| (54) ECCENTRIC SCREW PUMP WITH        | ZAYTSEV, Dmytro                      | MOTOR TO BE APPLIED IN DEEP SEA         |
| ASSEMBLY THROUGH THE HOLLOW           | (31) 102013020534                    | (73) Alfred-Wegener-Institut Helmholtz- |
| ROTOR                                 | (32) 12.12.2013                      | Zentrum für Polar- und Meeresforschung  |
| (73) Hugo Vogelsang Maschinenbau GmbH | (33) Germany                         | (72) LEMBURG, Johannes                  |
| (72) Krampe, Paul                     | (51) F04C 29/04                      | (31) 102017119158                       |
| (51) F04C 18/02                       | F04D 29/58                           | (32) 22.08.2017                         |
| F04C 23/00                            | F28D 7/00                            | (33) Germany                            |
| F04C 28/16                            | (11) EP3633201                       | (51) F04D 17/06                         |
| F04C 28/18                            | (21) EP19209952.1                    | F04D 25/06                              |
| F04C 28/24                            | (47) 07.07.2021                      | F04D 25/08                              |
| F04C 28/26                            | (22) 04.05.2015                      | F04D 29/28                              |
| F04C 29/00                            | (54) A COOLER APPLICABLE WITH A      | F04D 29/42                              |
| F04C 29/12                            | COMPRESSOR DEVICE                    | F04D 29/44                              |
| (11) EP3412914                        | (73) ATLAS COPCO AIRPOWER, naamloze  | (11) EP3456974                          |
| (21) EP18178381.2                     | vennootschap                         | (21) EP18174878.1                       |
| (47) 14.07.2021                       | (72) DE KERPEL, Stefan Paul M.       | (47) 14.07.2021                         |
| (22) 01.02.2017                       | GEERTS, Stephan Joanna M.            | (22) 29.05.2018                         |
| (54) SCROLL COMPRESSOR                | SERBRUYNS, Sven Bert                 | (54) MIXED-FLOW FAN                     |
| (73) LG Electronics Inc.              | (31) 201400370                       | (73) Delta Electronics, Inc.            |
| (72) JIN, Honggyun                    | (32) 16.05.2014                      | (72) CHEN, Shih-Di                      |
| JOO, Sangwoo                          | (33) Belgium                         | CHANG, Shun-Chen                        |
| (31) 20160064343                      |                                      | (31) 201710829145                       |
| (32) 25.05.2016                       |                                      |                                         |

|                                       |                                        |                                           |
|---------------------------------------|----------------------------------------|-------------------------------------------|
| (32) 14.09.2017                       | (54) COMPRESSOR CONTROL                | (87) US2015028856                         |
| (33) China                            | DURING POWER SUPPLY SYSTEM             | 05.11.2015                                |
| (51) F04D 19/04                       | DISTURBANCES                           | (22) 01.05.2015                           |
| F04D 27/02                            | (73) ABB Schweiz AG                    | (54) CENTRIFUGAL FAN ASSEMBLY AND         |
| F04D 29/52                            | (72) BESSELMANN, Thomas                | METHODS OF ASSEMBLING THE                 |
| F04D 29/64                            | CORTINOVIS, Andrea                     | SAME                                      |
| F04D 29/70                            | MERCANGOEZ, Mehmet                     | (73) Regal Beloit America, Inc.           |
| G01M 3/20                             | (51) F04D 27/00                        | (72) COCKS, Rachele B.                    |
| (11) EP3282129                        | G01N 1/24                              | STAUFFER, Zachary J.                      |
| (21) EP16202522.5                     | G01N 15/00                             | ROHOZA, Rafal P.                          |
| (47) 14.07.2021                       | G01N 15/14                             | (31) 201414268648                         |
| (22) 06.12.2016                       | G05D 7/00                              | (32) 02.05.2014                           |
| (54) VACUUM SYSTEM COMPRISING A       | G05D 7/06                              | (33) United States of America             |
| PRESSURE CONTROLLED VALVE             | (11) EP3390838                         | (51) F15B 11/08                           |
| (73) PFEIFFER VACUUM GMBH             | (21) EP16876742.4                      | F16H 59/02                                |
| (72) LOHSE, Martin                    | (47) 14.07.2021                        | F16H 61/02                                |
| SCHWEIGHÖFER, Michael                 | (87) US2016067087                      | F16H 61/688                               |
| STOLL, Tobias                         | 22.06.2017                             | F16H 61/40                                |
| HOFMANN, Jan                          | (22) 16.12.2016                        | (11) EP3486532                            |
| (31) 102016114983                     | (54) ENVIRONMENTAL SENSOR              | (21) EP18214667.0                         |
| (32) 12.08.2016                       | (73) Venturedyne, Ltd                  | (47) 14.07.2021                           |
| (33) Germany                          | (72) NEANDER, Nicholas C.              | (22) 04.11.2015                           |
| (51) F04D 25/06                       | CHANDLER, David L.                     | (54) GEAR-SHIFTING CONTROL SYSTEM         |
| F04D 25/08                            | (31) 201514972829                      | OF AUTOMATIC TRANSMISSION                 |
| F04D 29/00                            | 201514972866                           | (73) Guangzhou Automobile Group Co., Ltd. |
| F04D 29/32                            | 201514972884                           | (72) WU, Jian                             |
| F21V 7/00                             | (32) 17.12.2015                        | MO, Fan                                   |
| F21V 8/00                             | 17.12.2015                             | HUANG, Xinzhi                             |
| F21V 33/00                            | 17.12.2015                             | LIU, Xuewu                                |
| H05K 7/20                             | (33) United States of America          | ZHANG, Anwei                              |
| (11) EP3447301                        | United States of America               | (31) 201410657662                         |
| (21) EP18190456.6                     | United States of America               | 201410657549                              |
| (47) 07.07.2021                       | (51) F04D 27/02                        | (32) 18.11.2014                           |
| (22) 23.08.2018                       | (11) EP3406908                         | 18.11.2014                                |
| (54) LIGHT EMITTING FAN DEVICE WITH A | (21) EP18178650.0                      | (33) China                                |
| HYBRID OF LIGHT-REFLECTIVE AND        | (47) 14.07.2021                        | China                                     |
| LIGHT-GUIDING MECHANISMS              | (22) 11.05.2011                        | (51) F15B 15/26                           |
| (73) Giga-Byte Technology Co., Ltd.   | (54) METHOD OF ANTI-SURGE              | (11) EP3611389                            |
| (72) HUANG, Shun-Chih                 | PROTECTION FOR A DYNAMIC               | (21) EP19190472.1                         |
| MAO, Tai-Chuan                        | COMPRESSOR USING A SURGE               | (47) 07.07.2021                           |
| (31) 106129011                        | PARAMETER                              | (22) 07.08.2019                           |
| (32) 25.08.2017                       | (73) Energy Control Technologies, Inc. | (54) LINEAR ACTUATOR WITH LOCKING         |
| (33) Taiwan, Province of China        | (72) Narayanan, Krishnan               | AND TAMPER-PROOF LOCKING                  |
| (51) F04D 25/06                       | Reinke, Paul                           | DEVICE                                    |
| F04D 29/52                            | (31) 77744510                          | (73) Safran Landing Systems               |
| F04D 29/64                            | (32) 11.05.2010                        | (72) PETTENAZZI, Christelle               |
| F04D 29/66                            | (33) United States of America          | MONSANT, Laurent                          |
| F16F 1/373                            | (51) F04D 27/02                        | (31) 1857529                              |
| F16F 15/08                            | F04D 29/44                             | (32) 17.08.2018                           |
| (11) EP3511593                        | F04D 29/46                             | (33) France                               |
| (21) EP18170315.8                     | (11) EP3406915                         | (51) F15B 15/28                           |
| (47) 07.07.2021                       | (21) EP18168743.5                      | F15B 19/00                                |
| (22) 02.05.2018                       | (47) 14.07.2021                        | F15B 20/00                                |
| (54) FAN                              | (22) 23.04.2018                        | (11) EP3450774                            |
| (73) Yen Sun Technology Corp.         | (54) CENTRIFUGAL COMPRESSOR            | (21) EP17789222.1                         |
| (72) CHEN, Chien-Jung                 | HAVING A VARIABLE DIFFUSER WITH        | (47) 07.07.2021                           |
| WU, Hsin-Hsien                        | AXIALLY TRANSLATING END WALL           | (87) JP2017014510                         |
| HSU, Chih-Tsung                       | (73) Rolls-Royce Corporation           | 02.11.2017                                |
| (31) 107101147                        | (72) Hall, Christopher                 | (22) 07.04.2017                           |
| (32) 12.01.2018                       | Sayre, David                           | (54) CYLINDER OPERATION STATE             |
| (33) Taiwan, Province of China        | (31) 201715602643                      | MONITORING DEVICE                         |
| (51) F04D 25/16                       | (32) 23.05.2017                        | (73) SMC Corporation                      |
| F04D 27/02                            | (33) United States of America          | (72) FUJIWARA Atsushi                     |
| (11) EP3339653                        | (51) F04D 29/28                        | (31) 2016089003                           |
| (21) EP16205629.5                     | F04D 29/30                             | (32) 27.04.2016                           |
| (47) 07.07.2021                       | (11) EP3134650                         | (33) Japan                                |
| (22) 21.12.2016                       | (21) EP15786076.8                      | (51) F15B 19/00                           |
|                                       | (47) 07.07.2021                        | F16K 31/122                               |

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|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
| F16K 31/124                                             | (72) BURKHARD, Gregor                                                                                                       | (33) Germany                                                                                                        |
| F16K 37/00                                              | NÄGELI, Dominik Christian                                                                                                   | (51) F16B 13/04                                                                                                     |
| (11) EP3567288                                          | (31) 201662343419 P                                                                                                         | F16B 19/10                                                                                                          |
| (21) EP18171138.3                                       | 201662359281 P                                                                                                              | (11) EP3420239                                                                                                      |
| (47) 14.07.2021                                         | (32) 31.05.2016                                                                                                             | (21) EP17757392.0                                                                                                   |
| (22) 08.05.2018                                         | 07.07.2016                                                                                                                  | (47) 14.07.2021                                                                                                     |
| (54) VALVE CONTROLLER AND METHOD OF CONTROLLING A VALVE | (33) United States of America                                                                                               | (87) US2017019538                                                                                                   |
| (73) Alfa Laval Corporate AB                            | United States of America                                                                                                    | 31.08.2017                                                                                                          |
| (72) PRIISHOLM, Thomas                                  | (51) F16B 5/04                                                                                                              | (22) 24.02.2017                                                                                                     |
| MADSEN, Karsten Schack                                  | F16B 19/05                                                                                                                  | (54) EXPANDABLE COLLET BODIES WITH SECTIONAL FINGER-BASED ANTI-ROTATION FEATURE, CLIPS, INSERTS AND SYSTEMS THEREOF |
| (51) F16B 1/00                                          | (11) EP3553329                                                                                                              | (73) Centrix Inc.                                                                                                   |
| F16B 41/00                                              | (21) EP18166629.8                                                                                                           | (72) MCCLURE, Travis                                                                                                |
| F16B 43/00                                              | (47) 14.07.2021                                                                                                             | (31) 201662300491 P                                                                                                 |
| F16M 11/22                                              | (22) 10.04.2018                                                                                                             | (32) 26.02.2016                                                                                                     |
| F16M 13/02                                              | (54) A CONNECTION SYSTEM FOR CONNECTING TWO OR MORE OVERLAPPING LAYERS OF MATERIAL, AND RELATED JOINT AND CONNECTION METHOD | (33) United States of America                                                                                       |
| (11) EP3671002                                          | (73) C.R.F. Società Consortile per Azioni                                                                                   | (51) F16B 19/08                                                                                                     |
| (21) EP18460075.7                                       | (72) ANNICCHIARICO, Mr. Antonio                                                                                             | (11) EP3633215                                                                                                      |
| (47) 07.07.2021                                         | (51) F16B 5/06                                                                                                              | (21) EP18198260.4                                                                                                   |
| (22) 20.12.2018                                         | (11) EP3246580                                                                                                              | (47) 07.07.2021                                                                                                     |
| (54) MOUNTING SYSTEM AND A TECHNICAL COMPONENT          | (21) EP17171888.5                                                                                                           | (22) 02.10.2018                                                                                                     |
| (73) Lug Light Factory Sp. z o.o.                       | (47) 14.07.2021                                                                                                             | (54) SELF-PIERCING RIVET                                                                                            |
| (72) Romaniuk, Michal                                   | (22) 19.05.2017                                                                                                             | (73) Newfrey LLC                                                                                                    |
| Walendowski, Pawel                                      | (54) LOCKING RETAINER SYSTEM FOR AUTOMOTIVE ASSEMBLY                                                                        | (72) Schmitt, Andreas                                                                                               |
| Wieczorek, Kamil                                        | (73) Aptiv Technologies Limited                                                                                             | Bartig, Paul                                                                                                        |
| Duch, Maciej                                            | (72) PICKENS, Ryan J.                                                                                                       | Dostal, Dominik                                                                                                     |
| (51) F16B 2/00                                          | MORALES, Jesus R.                                                                                                           | Schneider, Joachim                                                                                                  |
| F16M 11/14                                              | (31) 201615159371                                                                                                           | Wissling, Matthias                                                                                                  |
| F16M 13/02                                              | (32) 19.05.2016                                                                                                             | (51) F16B 43/00                                                                                                     |
| B62J 11/00                                              | (33) United States of America                                                                                               | (11) EP3645899                                                                                                      |
| (11) EP3569484                                          | (51) F16B 5/06                                                                                                              | (21) EP18728888.1                                                                                                   |
| (21) EP19169718.4                                       | H02S 20/20                                                                                                                  | (47) 07.07.2021                                                                                                     |
| (47) 07.07.2021                                         | (11) EP3426934                                                                                                              | (87) EP2018064557                                                                                                   |
| (22) 17.04.2019                                         | (21) EP17763779.0                                                                                                           | 03.01.2019                                                                                                          |
| (54) CLAMPING DEVICE FOR A HANDLEBAR                    | (47) 07.07.2021                                                                                                             | (22) 04.06.2018                                                                                                     |
| (73) Schoch, Andreas                                    | (87) US2017020558                                                                                                           | (54) FILLING SYSTEM AND FIXING ARRANGEMENT FOR FILLING SLOT-LIKE RECESSES                                           |
| (72) Schoch, Andreas                                    | 14.09.2017                                                                                                                  | (73) fischerwerke GmbH & Co. KG                                                                                     |
| (31) 201810455458                                       | (22) 03.03.2017                                                                                                             | (72) HACKER, Oliver                                                                                                 |
| (32) 14.05.2018                                         | (54) MOUNTING BRACKET ASSEMBLIES AND METHODS                                                                                | HAGENLOCHER, Annika                                                                                                 |
| (33) China                                              | (73) Array Technologies, Inc.                                                                                               | (31) 102017114124                                                                                                   |
| (51) F16B 2/06                                          | (72) CORIO, Ronald, P.                                                                                                      | (32) 26.06.2017                                                                                                     |
| F16B 2/08                                               | WILLIAMSON, John, N.                                                                                                        | (33) Germany                                                                                                        |
| F16L 3/13                                               | MCLANE, Kaleb, W.                                                                                                           | (51) F16C 3/06                                                                                                      |
| (11) EP3356714                                          | (31) 201615063098                                                                                                           | F16C 17/02                                                                                                          |
| (21) EP16852782.8                                       | (32) 07.03.2016                                                                                                             | F16C 19/54                                                                                                          |
| (47) 14.07.2021                                         | (33) United States of America                                                                                               | F16H 1/32                                                                                                           |
| (87) US2016054997                                       | (51) F16B 5/06                                                                                                              | F16H 57/021                                                                                                         |
| 06.04.2017                                              | H05K 5/00                                                                                                                   | (11) EP3276202                                                                                                      |
| (22) 30.09.2016                                         | (11) EP3601814                                                                                                              | (21) EP17182469.1                                                                                                   |
| (54) SINGLE BOLT CLAMP SHAFT                            | (21) EP18705901.9                                                                                                           | (47) 14.07.2021                                                                                                     |
| (73) Karsten Manufacturing Corporation                  | (47) 14.07.2021                                                                                                             | (22) 21.07.2017                                                                                                     |
| (72) GLOVER, Jim                                        | (87) EP2018053823                                                                                                           | (54) GEAR DEVICE                                                                                                    |
| (31) 201562236770 P                                     | 27.09.2018                                                                                                                  | (73) Nabtesco Corporation                                                                                           |
| (32) 02.10.2015                                         | (22) 15.02.2018                                                                                                             | (72) YOSHIDA, Shunsuke                                                                                              |
| (33) United States of America                           | (54) CONNECTOR FOR CONNECTING TWO HOUSING PARTS AND HOUSING COMPRISING TWO HOUSING PARTS AND AT LEAST ONE CONNECTOR         | FURUTA, Kazuya                                                                                                      |
| (51) F16B 5/01                                          | (73) Robert Bosch GmbH                                                                                                      | MASUDA, Tomohiko                                                                                                    |
| F16B 13/14                                              | (72) MIKLOSI, Zoltan                                                                                                        | (31) 2016148696                                                                                                     |
| (11) EP3464911                                          | (31) 102017204600                                                                                                           | (32) 28.07.2016                                                                                                     |
| (21) EP17729819.7                                       | (32) 20.03.2017                                                                                                             | (33) Japan                                                                                                          |
| (47) 14.07.2021                                         |                                                                                                                             | (51) F16C 7/02                                                                                                      |
| (87) EP2017063203                                       |                                                                                                                             | F16C 9/04                                                                                                           |
| 07.12.2017                                              |                                                                                                                             | (11) EP3502495                                                                                                      |
| (22) 31.05.2017                                         |                                                                                                                             | (21) EP18206843.7                                                                                                   |
| (54) INSERT SYSTEM, INSERT AND PANEL ASSEMBLY           |                                                                                                                             |                                                                                                                     |
| (73) RUAG Schweiz AG                                    |                                                                                                                             |                                                                                                                     |

|                                                             |                                                                    |                                                                                                                  |
|-------------------------------------------------------------|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| (47) 07.07.2021                                             | 02.05.2019                                                         | (51) F16C 33/10                                                                                                  |
| (22) 16.11.2018                                             | (22) 26.10.2018                                                    | F16C 33/14                                                                                                       |
| (54) CONNECTING ROD MANUFACTURING METHOD AND CONNECTING ROD | (54) A MAGNETIC BEARING ASSEMBLY AS WELL AS A LINEAR GUIDEWAY      | F16C 33/20                                                                                                       |
| (73) TOYOTA JIDOSHA KABUSHIKI KAISHA                        | ASSEMBLY IMPLEMENTING ONE OR MORE SUCH MAGNETIC BEARING ASSEMBLIES | F16C 33/66                                                                                                       |
| (72) KAWAZOE, Takaaki                                       | (73) VDL Enabling Technologies Group B.V.                          | (11) EP2994655                                                                                                   |
| (31) 2017248195                                             | (72) PEIJNENBURG, ANTONIUS                                         | (21) EP14723054.4                                                                                                |
| (32) 25.12.2017                                             | THEODORUS ADRIANUS                                                 | (47) 07.07.2021                                                                                                  |
| (33) Japan                                                  | BAADE, Rick                                                        | (87) EP2014059364                                                                                                |
| (51) F16C 19/36                                             | (31) 2019812                                                       | 13.11.2014                                                                                                       |
| F16C 33/30                                                  | (32) 26.10.2017                                                    | (22) 07.05.2014                                                                                                  |
| F16C 33/36                                                  | (33) Netherlands                                                   | (54) SLIDING ENGINE COMPONENT                                                                                    |
| F16C 33/58                                                  | (51) F16C 29/00                                                    | (73) Mahle International GmbH                                                                                    |
| (11) EP3721105                                              | F16F 9/32                                                          | Mahle Engine Systems UK Limited                                                                                  |
| (21) EP18819545.7                                           | F16H 25/20                                                         | (72) GORGES, Roger                                                                                               |
| (47) 14.07.2021                                             | F16H 25/22                                                         | CAREY, John                                                                                                      |
| (87) FR2018053013                                           | F16H 25/24                                                         | RATHOD, Anil                                                                                                     |
| 13.06.2019                                                  | (11) EP3401571                                                     | (31) 201308182                                                                                                   |
| (22) 27.11.2018                                             | (21) EP17170582.5                                                  | (32) 07.05.2013                                                                                                  |
| (54) BEARING HAVING CHEVRON ROLLERS                         | (47) 07.07.2021                                                    | (33) United Kingdom                                                                                              |
| (73) Dubus, Jérôme                                          | (22) 11.05.2017                                                    | (51) F16D 1/10                                                                                                   |
| (72) Dubus, Jérôme                                          | (54) BALL SCREW                                                    | F16D 3/06                                                                                                        |
| (31) 1761592                                                | (73) SFS Intec Holding AG                                          | F16D 3/56                                                                                                        |
| (32) 04.12.2017                                             | (72) Kuster, Hanspeter                                             | (11) EP3572684                                                                                                   |
| (33) France                                                 | Leuenberger, Pascal                                                | (21) EP19176180.8                                                                                                |
| (51) F16C 19/36                                             | Sinz, Daniel                                                       | (47) 07.07.2021                                                                                                  |
| F16C 33/36                                                  | (51) F16C 29/02                                                    | (22) 23.05.2019                                                                                                  |
| F16C 33/58                                                  | F16C 32/06                                                         | (54) FLEX COUPLING PRODUCED USING ADDITIVE MANUFACTURING                                                         |
| (11) EP3438480                                              | F16C 33/74                                                         | (73) Liebherr-Aerospace Lindenberg GmbH                                                                          |
| (21) EP17774645.0                                           | F16J 15/40                                                         | (72) Hermann, Stefan                                                                                             |
| (47) 14.07.2021                                             | (11) EP3638913                                                     | Berger, Lutz                                                                                                     |
| (87) JP2017011660                                           | (21) EP18729321.2                                                  | (31) 102018112485                                                                                                |
| 05.10.2017                                                  | (47) 14.07.2021                                                    | (32) 24.05.2018                                                                                                  |
| (22) 23.03.2017                                             | (87) EP2018000260                                                  | (33) Germany                                                                                                     |
| (54) TAPERED ROLLER BEARING                                 | 20.12.2018                                                         | (51) F16D 3/223                                                                                                  |
| (73) NTN Corporation                                        | (22) 17.05.2018                                                    | B23K 15/00                                                                                                       |
| (72) MATSUSHITA, Tomoki                                     | (54) HYDROSTATIC SLIDE BEARING                                     | F16D 1/068                                                                                                       |
| (31) 2016074332                                             | (73) Hochschule Niederrhein                                        | F16D 3/20                                                                                                        |
| (32) 01.04.2016                                             | (72) HOPPERMANN, Andreas                                           | F16D 3/205                                                                                                       |
| (33) Japan                                                  | (31) 102017005663                                                  | B23K 26/21                                                                                                       |
| (51) F16C 19/38                                             | (32) 14.06.2017                                                    | B23K 26/28                                                                                                       |
| F16C 33/60                                                  | (33) Germany                                                       | (11) EP3159566                                                                                                   |
| F16C 33/78                                                  | (51) F16C 32/04                                                    | (21) EP15810183.2                                                                                                |
| F16C 33/80                                                  | H02K 7/09                                                          | (47) 07.07.2021                                                                                                  |
| (11) EP3607220                                              | (11) EP3469691                                                     | (87) JP2015064497                                                                                                |
| (21) EP18717308.3                                           | (21) EP17813759.2                                                  | 23.12.2015                                                                                                       |
| (47) 07.07.2021                                             | (47) 14.07.2021                                                    | (22) 20.05.2015                                                                                                  |
| (87) EP2018058867                                           | (87) US2017033692                                                  | (54) METHOD OF MANUFACTURING AN OUTER JOINT MEMBER OF A CONSTANT-VELOCITY UNIVERSAL JOINT AND OUTER JOINT MEMBER |
| 11.10.2018                                                  | 21.12.2017                                                         | (73) NTN Corporation                                                                                             |
| (22) 06.04.2018                                             | (22) 19.05.2017                                                    | (72) SHIMASAWA Takeshi                                                                                           |
| (54) TAPER ROLLER BEARINGS AND WIND TURBINE                 | (54) HALBACH-ARRAY CONFIGURATION                                   | NAKAGAWA Naoki                                                                                                   |
| (73) thyssenkrupp rothe erde Germany GmbH                   | (73) Lawrence Livermore National Security, LLC                     | HIRAOKA Tsuneaki                                                                                                 |
| thyssenkrupp AG                                             | (72) POST, Richard F.                                              | SUZUKI Shintaro                                                                                                  |
| (72) PILK, Bernfried                                        | (31) 201615181317                                                  | SUGIYAMA Tatsuro                                                                                                 |
| SANTORO, Simone Angelo                                      | (32) 13.06.2016                                                    | KOBAYASHI Masazumi                                                                                               |
| (31) 102017107553                                           | (33) United States of America                                      | (31) 2014125497                                                                                                  |
| (32) 07.04.2017                                             | (51) F16C 32/06                                                    | (32) 18.06.2014                                                                                                  |
| (33) Germany                                                | (11) EP3653895                                                     | (33) Japan                                                                                                       |
| (51) F16C 29/00                                             | (21) EP18206526.8                                                  | (51) F16D 3/84                                                                                                   |
| F16C 32/04                                                  | (47) 14.07.2021                                                    | F16J 3/04                                                                                                        |
| G03F 7/20                                                   | (22) 15.11.2018                                                    | F16J 15/52                                                                                                       |
| H01L 21/677                                                 | (54) AEROSTATIC BEARING                                            | (11) EP3276198                                                                                                   |
| (11) EP3701160                                              | (73) ETEL S.A.                                                     | (21) EP16768323.4                                                                                                |
| (21) EP18812377.2                                           | (72) MAAMARI, Nadim                                                | (47) 14.07.2021                                                                                                  |
| (47) 14.07.2021                                             |                                                                    | (87) JP2016056428                                                                                                |
| (87) NL2018050713                                           |                                                                    |                                                                                                                  |

|                                                                                                 |                                                                                                                         |                                                                                                                                          |
|-------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| 29.09.2016                                                                                      | (31) 102014209594                                                                                                       | (22) 10.03.2015                                                                                                                          |
| (22) 02.03.2016                                                                                 | 102014218541                                                                                                            | (54) CLUTCH OPERATING DEVICE                                                                                                             |
| (54) BOOT ATTACHMENT METHOD AND<br>CONSTANT VELOCITY UNIVERSAL<br>JOINT                         | (32) 20.05.2014                                                                                                         | (73) Schaeffler Technologies AG & Co. KG                                                                                                 |
| (73) NTN Corporation                                                                            | 16.09.2014                                                                                                              | (72) HONSELMANN, Sebastian                                                                                                               |
| (72) KOHARA Mika                                                                                | (33) Germany                                                                                                            | WELTER, Roland                                                                                                                           |
| (31) 2015064495                                                                                 | Germany                                                                                                                 | (31) 102014205967                                                                                                                        |
| 2015064506                                                                                      | (51) F16D 13/58                                                                                                         | (32) 31.03.2014                                                                                                                          |
| 2015064517                                                                                      | (11) EP3645904                                                                                                          | (33) Germany                                                                                                                             |
| 2015064520                                                                                      | (21) EP18733801.7                                                                                                       | (51) F16D 25/061                                                                                                                         |
| (32) 26.03.2015                                                                                 | (47) 07.07.2021                                                                                                         | (11) EP3064794                                                                                                                           |
| 26.03.2015                                                                                      | (87) EP2018065058                                                                                                       | (21) EP16158152.5                                                                                                                        |
| 26.03.2015                                                                                      | 03.01.2019                                                                                                              | (47) 07.07.2021                                                                                                                          |
| 26.03.2015                                                                                      | (22) 07.06.2018                                                                                                         | (22) 02.03.2016                                                                                                                          |
| (33) Japan                                                                                      | (54) RANGE OF CLUTCH DIAPHRAGMS<br>AND METHODS FOR RECOGNISING<br>AND SELECTING A CLUTCH<br>DIAPHRAGM FROM SUCH A RANGE | (54) MESHING-TYPE ENGAGEMENT<br>DEVICE                                                                                                   |
| Japan                                                                                           | (73) Valeo Embrayages                                                                                                   | (73) Toyota Jidosha Kabushiki Kaisha                                                                                                     |
| Japan                                                                                           | (72) MARECHAL, Olivier                                                                                                  | (72) YOSHINO, Hirotsugu                                                                                                                  |
| Japan                                                                                           | SAPAN, Derya                                                                                                            | TABUCHI, Motoki                                                                                                                          |
| (51) F16D 11/00                                                                                 | (31) 1756189                                                                                                            | KAWAKAMI, Takaho                                                                                                                         |
| F16D 11/10                                                                                      | (32) 30.06.2017                                                                                                         | KUWAHARA, Seiji                                                                                                                          |
| F16D 27/118                                                                                     | (33) France                                                                                                             | SHIOTSU, Isamu                                                                                                                           |
| F16H 48/24                                                                                      | (51) F16D 13/58                                                                                                         | (31) 2015040133                                                                                                                          |
| (11) EP3106695                                                                                  | F16D 13/68                                                                                                              | (32) 02.03.2015                                                                                                                          |
| (21) EP14882427.9                                                                               | (11) EP3628884                                                                                                          | (33) Japan                                                                                                                               |
| (47) 07.07.2021                                                                                 | (21) EP19197885.7                                                                                                       | (51) F16D 25/08                                                                                                                          |
| (87) JP2014053454                                                                               | (47) 14.07.2021                                                                                                         | F16J 15/32                                                                                                                               |
| 20.08.2015                                                                                      | (22) 17.09.2019                                                                                                         | F16J 15/3284                                                                                                                             |
| (22) 14.02.2014                                                                                 | (54) SUBASSEMBLY FOR CLUTCH<br>MECHANISM AND CLUTCH<br>MECHANISM COMPRISING SUCH A<br>SUBASSEMBLY                       | (11) EP3494324                                                                                                                           |
| (54) CLUTCH AND DIFFERENTIAL DEVICE<br>WITH SAME                                                | (73) VALEO EMBRAYAGES                                                                                                   | (21) EP17751235.7                                                                                                                        |
| (73) GKN Driveline Japan Ltd                                                                    | (72) DUBOIS, Bernard                                                                                                    | (47) 07.07.2021                                                                                                                          |
| (72) INOSE, Hideyuki                                                                            | BOUCHE, Gabriel                                                                                                         | (87) DE2017100603                                                                                                                        |
| YAMANAKA, Yasuo                                                                                 | CRESSET, Jérôme                                                                                                         | 08.02.2018                                                                                                                               |
| MARUYAMA, Atsushi                                                                               | REDIEN, Cyril                                                                                                           | (22) 20.07.2017                                                                                                                          |
| (51) F16D 13/22                                                                                 | (31) 1858932                                                                                                            | (54) PRESSURE CYLINDER HAVING A<br>SHRINK RING WHICH SERVES AS<br>A SEAL FOR SIMPLE MOUNTING<br>ON A GUIDE SLEEVE REGION OF A<br>HOUSING |
| F16D 27/00                                                                                      | (32) 28.09.2018                                                                                                         | (73) Schaeffler Technologies AG & Co. KG                                                                                                 |
| F16D 27/04                                                                                      | (33) France                                                                                                             | (72) MARKERT, Melanie                                                                                                                    |
| F16D 27/06                                                                                      | (51) F16D 23/14                                                                                                         | FRIETSCH, Frank                                                                                                                          |
| F16D 27/08                                                                                      | (11) EP3589856                                                                                                          | (31) 102016214551                                                                                                                        |
| F16D 27/112                                                                                     | (21) EP18705340.0                                                                                                       | (32) 05.08.2016                                                                                                                          |
| (11) EP3445987                                                                                  | (47) 07.07.2021                                                                                                         | (33) Germany                                                                                                                             |
| (21) EP17803356.9                                                                               | (87) EP2018052804                                                                                                       | (51) F16D 27/06                                                                                                                          |
| (47) 07.07.2021                                                                                 | 07.09.2018                                                                                                              | F16D 27/09                                                                                                                               |
| (87) US2017033779                                                                               | (22) 05.02.2018                                                                                                         | (11) EP3561332                                                                                                                           |
| 30.11.2017                                                                                      | (54) VEHICLE CLUTCH WITH CLUTCH<br>BEARING HAVING ALIGNMENT<br>ELEMENT FOR CLUTCH SPRING                                | (21) EP19171439.3                                                                                                                        |
| (22) 22.05.2017                                                                                 | (73) KNORR-BREMSE Systeme für<br>Nutzfahrzeuge GmbH                                                                     | (47) 07.07.2021                                                                                                                          |
| (54) PRIME MOVER SYSTEMS INCLUDING<br>MULTI-ACCESSORY DRIVES AND<br>METHODS OF CONTROLLING SAME | (72) SAINTIVE, Michel                                                                                                   | (22) 26.04.2019                                                                                                                          |
| (73) Cummins, Inc.                                                                              | MARESCOT, Jean-Baptiste                                                                                                 | (54) ROTATABLE ELECTROMAGNETIC<br>CLUTCH UTILIZING INDUCTIVE<br>COUPLING                                                                 |
| (72) RICHARDS, Kieran, J.                                                                       | AMIOT, Frederic                                                                                                         | (73) Hamilton Sundstrand Corporation                                                                                                     |
| SHARPE, David, George                                                                           | MELLAR, Jörg                                                                                                            | (72) MASTROCOLA, Naison E.                                                                                                               |
| (31) 201662342238 P                                                                             | (31) 102017104201                                                                                                       | (31) 201815963289                                                                                                                        |
| (32) 27.05.2016                                                                                 | (32) 01.03.2017                                                                                                         | (32) 26.04.2018                                                                                                                          |
| (33) United States of America                                                                   | (33) Germany                                                                                                            | (33) United States of America                                                                                                            |
| (51) F16D 13/58                                                                                 | (51) F16D 25/00                                                                                                         | (51) F16D 27/06                                                                                                                          |
| (11) EP3146225                                                                                  | F16D 48/02                                                                                                              | F16D 27/09                                                                                                                               |
| (21) EP15737965.2                                                                               | F16D 48/04                                                                                                              | (11) EP3561331                                                                                                                           |
| (47) 07.07.2021                                                                                 | (11) EP3126700                                                                                                          | (21) EP19171315.5                                                                                                                        |
| (87) DE2015000247                                                                               | (21) EP15715971.6                                                                                                       | (47) 07.07.2021                                                                                                                          |
| 26.11.2015                                                                                      | (47) 07.07.2021                                                                                                         | (22) 26.04.2019                                                                                                                          |
| (22) 19.05.2015                                                                                 | (87) DE2015200136                                                                                                       | (54) ACTUATOR WITH ROTATING<br>ELECTROMAGNETIC CLUTCH<br>UTILIZING INDUCTIVE COUPLING                                                    |
| (54) SPRING ARRANGEMENT FOR A<br>FRICTION CLUTCH                                                | 08.10.2015                                                                                                              | (73) Hamilton Sundstrand Corporation                                                                                                     |
| (73) Schaeffler Technologies AG & Co. KG                                                        |                                                                                                                         |                                                                                                                                          |
| (72) LORAN, Igor                                                                                |                                                                                                                         |                                                                                                                                          |
| REICHERT, Christophe                                                                            |                                                                                                                         |                                                                                                                                          |

|                                            |                                          |                                    |
|--------------------------------------------|------------------------------------------|------------------------------------|
| (72) MASTROCOLA, Naison E.                 | (33) United States of America            | (54) BRAKING DEVICE FOR A HEAVY    |
| (31) 201815963342                          | (51) F16D 55/2255                        | VEHICLE AND A METHOD FOR           |
| (32) 26.04.2018                            | F16D 55/227                              | PREVENTING OVERHEATING OF THE      |
| (33) United States of America              | F16D 65/18                               | BRAKES OF A HEAVY VEHICLE          |
| (51) F16D 27/10                            | F16D 65/56                               | (73) ITT Italia S.r.l.             |
| F16D 41/08                                 | (11) EP3631228                           | (72) SERRA, Stefano                |
| F16D 41/10                                 | (21) EP18730657.6                        | DONZELLI, Daniele                  |
| F16D 51/62                                 | (47) 14.07.2021                          | SOLARI, Mattia                     |
| (11) EP3447324                             | (87) EP2018063740                        | TERRANOVA, Marco                   |
| (21) EP17187964.6                          | 29.11.2018                               | (31) UB20153706                    |
| (47) 07.07.2021                            | (22) 24.05.2018                          | (32) 17.09.2015                    |
| (22) 25.08.2017                            | (54) DISK BRAKE AND BRAKE ACTUATION      | (33) Italy                         |
| (54) BRAKING OR CLUTCH ASSEMBLY            | MECHANISM                                | (51) F16D 65/10                    |
| FOR ROTATING SHAFTS                        | (73) Haldex Brake Products AB            | (11) EP3707405                     |
| (73) Goodrich Actuation Systems Limited    | (72) KJELL, Önnestam                     | (21) EP18803592.7                  |
| (72) KRACKE, Jeremy                        | (31) 102017005027                        | (47) 14.07.2021                    |
| (51) F16D 48/02                            | (32) 26.05.2017                          | (87) EP2018080555                  |
| F16D 48/06                                 | (33) Germany                             | 16.05.2019                         |
| (11) EP3505785                             | (51) F16D 55/226                         | (22) 08.11.2018                    |
| (21) EP17843692.9                          | F16D 65/18                               | (54) BRAKE DRUM FOR A VEHICLE DRUM |
| (47) 14.07.2021                            | (11) EP3683467                           | BRAKE                              |
| (87) JP2017030370                          | (21) EP19152037.8                        | (73) Robert Bosch GmbH             |
| 01.03.2018                                 | (47) 14.07.2021                          | (72) HUSCHENHOEFER, Wolfgang       |
| (22) 24.08.2017                            | (22) 16.01.2019                          | BAHROUN, Karim                     |
| (54) CLUTCH CONTROL DEVICE AND             | (54) ACTUATING DEVICE FOR A UTILITY      | (31) 102017219924                  |
| CLUTCH CONTROL METHOD                      | VEHICLE DISC BRAKE AND A DISC            | (32) 09.11.2017                    |
| (73) Knorr-Bremse Commercial Vehicle       | BRAKE FOR A UTILITY VEHICLE              | (33) Germany                       |
| Systems Japan Ltd.                         | (73) ZF CV Systems Europe BV             | (51) F16D 65/56                    |
| (72) TAKEUCHI, Junya                       | (72) HECKER, Jannis                      | F16D 65/60                         |
| NAGASE, Takuya                             | SCHERER, Vitalij                         | (11) EP3685069                     |
| (31) 2016165165                            | JUNGMANN, Hans-Christian                 | (21) EP17791571.7                  |
| (32) 25.08.2016                            | (51) F16D 55/228                         | (47) 14.07.2021                    |
| (33) Japan                                 | F16D 65/00                               | (87) EP2017001120                  |
| (51) F16D 48/06                            | G01D 5/14                                | 28.03.2019                         |
| (11) EP3221609                             | (11) EP3679328                           | (22) 21.09.2017                    |
| (21) EP15798659.7                          | (21) EP17780794.8                        | (54) DISC BRAKE ACTUATOR           |
| (47) 07.07.2021                            | (47) 07.07.2021                          | (73) ZF CV Systems Europe BV       |
| (87) US2015060824                          | (87) FR2017052384                        | (72) GROSSKOPF, Ralf               |
| 26.05.2016                                 | 14.03.2019                               | HENNING, Paul                      |
| (22) 16.11.2015                            | (22) 07.09.2017                          | STRZALA, Wieslaw                   |
| (54) A METHOD TO CONTROL CLUTCH            | (54) ELECTROMAGNETIC ACTUATOR            | (51) F16F 1/376                    |
| FORCE IN A CLUTCH PACK                     | (73) Warner Electric Europe S.A.S        | F16F 1/38                          |
| (73) Dana Automotive Systems Group, LLC    | (72) COUTURIER, Eric                     | (11) EP3347615                     |
| (72) GOOSSENS, Stijn                       | VOLANT, Eric                             | (21) EP16766463.0                  |
| VYNCKE, Thomas, J.                         | BARDON, Arnaud                           | (47) 14.07.2021                    |
| VERSTEYHE, Mark, R.J.                      | (51) F16D 55/28                          | (87) US2016050973                  |
| (31) 201462081948 P                        | F16D 55/36                               | 16.03.2017                         |
| (32) 19.11.2014                            | (11) EP3643942                           | (22) 09.09.2016                    |
| (33) United States of America              | (21) EP19204896.5                        | (54) BUSHING FOR LIFT AXLE/        |
| (51) F16D 55/00                            | (47) 14.07.2021                          | SUSPENSION SYSTEMS                 |
| (11) EP2885553                             | (22) 23.10.2019                          | (73) Hendrickson USA, L.L.C.       |
| (21) EP13829836.9                          | (54) BRAKING DEVICE                      | (72) WESTNEDGE, Andrew J.          |
| (47) 07.07.2021                            | (73) Desch Antriebstechnik GmbH & Co. KG | GUNTERMANN, James Anthony          |
| (87) US2013054678                          | (72) REINARTZ, Thomas                    | Krueger                            |
| 20.02.2014                                 | (31) 102018126316                        | (31) 201562215803 P                |
| (22) 13.08.2013                            | (32) 23.10.2018                          | (32) 09.09.2015                    |
| (54) METHOD FOR INSTALLING AND             | (33) Germany                             | (33) United States of America      |
| REMOVING A BRAKE PAD OF A DISC             | (51) F16D 65/08                          | (51) F16F 7/10                     |
| BRAKE                                      | F16D 65/092                              | F03D 80/00                         |
| (73) Bendix Commercial Vehicle Systems LLC | G01L 1/16                                | F03D 80/80                         |
| (72) PLANTAN, Ronald, S.                   | G01L 5/28                                | (11) EP3048326                     |
| RADHAKRISHNAN, Harish                      | (11) EP3350466                           | (21) EP16150560.7                  |
| WOLF, Dennis, A.                           | (21) EP16770243.0                        | (47) 07.07.2021                    |
| LANTZ, Richard, L.                         | (47) 14.07.2021                          | (22) 08.01.2016                    |
| ROBERTS, Will, E.                          | (87) EP2016071865                        | (54) VIBRATION DAMPER FOR A WIND   |
| BELL, Steven, C.                           | 23.03.2017                               | TURBINE, METHOD FOR INSTALLING     |
| (31) 201213588527                          | (22) 15.09.2016                          | A VIBRATION DAMPER IN A TOWER      |
| (32) 17.08.2012                            |                                          |                                    |

|                                                      |                                                                                        |                                                                                                                        |
|------------------------------------------------------|----------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| OF A WIND ENERGY SYSTEM AND<br>WIND ENERGY SYSTEM    | 02.04.2020                                                                             | (11) EP3358291                                                                                                         |
| (73) Siemens Gamesa Renewable Energy<br>Service GmbH | (22) 27.09.2019                                                                        | (21) EP16851030.3                                                                                                      |
| (72) SEIDEL, Marc                                    | (54) HIGH-EFFICIENCY BELT AND<br>METHOD OF MANUFACTURING THE<br>SAME                   | (47) 14.07.2021                                                                                                        |
| KLUIBENSCHEDL, Andreas                               | (73) Gates Corporation                                                                 | (87) JP2016075919                                                                                                      |
| REITERER, Michael                                    | (72) GERRING, Douglas                                                                  | 06.04.2017                                                                                                             |
| (31) 102015000789                                    | SPRING, Kyle                                                                           | (22) 05.09.2016                                                                                                        |
| (32) 26.01.2015                                      | MOSS, Tom                                                                              | (54) CONTINUOUSLY VARIABLE<br>TRANSMISSION DEVICE                                                                      |
| (33) Germany                                         | (31) 201862737517 P                                                                    | (73) Melexis Technologies SA                                                                                           |
| (51) F16F 9/06                                       | (32) 27.09.2018                                                                        | (72) YOSHIYA, Takumi                                                                                                   |
| F16F 9/49                                            | (33) United States of America                                                          | (31) 2015189669                                                                                                        |
| (11) EP3163114                                       | (51) F16G 5/16                                                                         | (32) 28.09.2015                                                                                                        |
| (21) EP16194107.5                                    | (11) EP3301322                                                                         | (33) Japan                                                                                                             |
| (47) 07.07.2021                                      | (21) EP17020412.7                                                                      | (51) F16H 27/08                                                                                                        |
| (22) 17.10.2016                                      | (47) 14.07.2021                                                                        | F16H 33/02                                                                                                             |
| (54) DAMPER                                          | (22) 20.12.2013                                                                        | F16H 35/00                                                                                                             |
| (73) Showa Corporation                               | (54) DRIVE BELT PROVIDED WITH A RING<br>SET WITH STEEL RINGS HAVING A<br>NITRIDE LAYER | F16K 31/53                                                                                                             |
| (72) YOSHIDA, Kojiro                                 | (73) Robert Bosch GmbH                                                                 | (11) EP3569894                                                                                                         |
| (31) 2015210061                                      | (72) Pennings, Bert                                                                    | (21) EP18172183.8                                                                                                      |
| (32) 26.10.2015                                      | (31) 1039974                                                                           | (47) 07.07.2021                                                                                                        |
| (33) Japan                                           | (32) 27.12.2012                                                                        | (22) 14.05.2018                                                                                                        |
| (51) F16F 9/34                                       | (33) Netherlands                                                                       | (54) ACTUATOR                                                                                                          |
| F16K 15/02                                           | (51) F16G 13/02                                                                        | (73) Siemens Schweiz AG                                                                                                |
| F16K 15/08                                           | F16G 15/12                                                                             | (72) KONRAD, Hilmar                                                                                                    |
| F16K 17/04                                           | F16G 15/14                                                                             | (51) F16H 48/08                                                                                                        |
| (11) EP3222874                                       | (11) EP3660350                                                                         | F16H 48/22                                                                                                             |
| (21) EP16162249.3                                    | (21) EP18208867.4                                                                      | F16H 57/04                                                                                                             |
| (47) 07.07.2021                                      | (47) 07.07.2021                                                                        | (11) EP3406943                                                                                                         |
| (22) 24.03.2016                                      | (22) 28.11.2018                                                                        | (21) EP17858155.9                                                                                                      |
| (54) CHECK VALVE ASSEMBLY                            | (54) CHAIN LINK AND CHAIN WITH CHAIN<br>WHEEL                                          | (47) 07.07.2021                                                                                                        |
| (73) ÖHLINS RACING AB                                | (73) Gebr. Konrad GmbH                                                                 | (87) JP2017032687                                                                                                      |
| (72) HANSSON, Erik                                   | (72) BRAUN, Jürgen                                                                     | 12.04.2018                                                                                                             |
| (51) F16F 13/10                                      | (51) F16G 13/06                                                                        | (22) 11.09.2017                                                                                                        |
| (11) EP3626997                                       | B62M 1/28                                                                              | (54) AXLE ASSEMBLY                                                                                                     |
| (21) EP18802069.7                                    | (11) EP3636957                                                                         | (73) Komatsu Ltd.                                                                                                      |
| (47) 07.07.2021                                      | (21) EP18199357.7                                                                      | (72) DEWA, Tatsuya                                                                                                     |
| (87) JP2018004388                                    | (47) 14.07.2021                                                                        | NAKAMURA, Takao                                                                                                        |
| 22.11.2018                                           | (22) 09.10.2018                                                                        | (31) 2016195715                                                                                                        |
| (22) 08.02.2018                                      | (54) BICYCLE CHAIN                                                                     | (32) 03.10.2016                                                                                                        |
| (54) VIBRATION DAMPING DEVICE                        | (73) Miranda & Irmão Lda.                                                              | (33) Japan                                                                                                             |
| (73) Bridgestone Corporation                         | (72) Tavares Miranda, Joao Filipe                                                      | (51) F16H 55/36                                                                                                        |
| (72) UEKI, Akira                                     | (51) F16H 3/66                                                                         | F16H 55/40                                                                                                             |
| NAGASHIMA, Yasuyuki                                  | F16H 15/28                                                                             | (11) EP3542084                                                                                                         |
| SATAKE, Yuki                                         | F16H 37/08                                                                             | (21) EP17803891.5                                                                                                      |
| (31) 2017098942                                      | (11) EP3206904                                                                         | (47) 07.07.2021                                                                                                        |
| (32) 18.05.2017                                      | (21) EP15850616.2                                                                      | (87) EP2017079808                                                                                                      |
| (33) Japan                                           | (47) 14.07.2021                                                                        | 24.05.2018                                                                                                             |
| (51) F16F 15/14                                      | (87) US2015056003                                                                      | (22) 20.11.2017                                                                                                        |
| (11) EP3645911                                       | 21.04.2016                                                                             | (54) SHEAVE                                                                                                            |
| (21) EP18732242.5                                    | (22) 16.10.2015                                                                        | (73) Arntz Beteiligungs GmbH & Co. KG                                                                                  |
| (47) 07.07.2021                                      | (54) SPLIT POWER INFINITELY VARIABLE<br>TRANSMISSION ARCHITECTURE                      | (72) FRENZEL, André                                                                                                    |
| (87) DE2018100502                                    | INCORPORATING A PLANETARY TYPE                                                         | (31) 102016122366                                                                                                      |
| 03.01.2019                                           | BALL VARIATOR WITH LOW VARIATOR<br>LOADING AT VEHICLE LAUNCH                           | (32) 21.11.2016                                                                                                        |
| (22) 24.05.2018                                      | (73) Allison Transmission, Inc.                                                        | (33) Germany                                                                                                           |
| (54) TUNED MASS DAMPER                               | (72) SCHOOLCRAFT, Brian                                                                | (51) F16H 57/08                                                                                                        |
| (73) Schaeffler Technologies GmbH & Co. KG           | (31) 201414517400                                                                      | F16H 57/04                                                                                                             |
| (72) MAIENSCHN, Stephan                              | (32) 17.10.2014                                                                        | (11) EP3696448                                                                                                         |
| (31) 102017114514                                    | (33) United States of America                                                          | (21) EP20157101.5                                                                                                      |
| (32) 29.06.2017                                      | (51) F16H 9/08                                                                         | (47) 07.07.2021                                                                                                        |
| (33) Germany                                         | G01B 7/14                                                                              | (22) 13.02.2020                                                                                                        |
| (51) F16G 1/08                                       | G01D 5/14                                                                              | (54) LUBRICATION OF A PLANET CARRIER<br>FOR A MECHANICAL GEAR OF A<br>TURBINE ENGINE, IN PARTICULAR<br>FOR AN AIRCRAFT |
| F16G 1/28                                            |                                                                                        | (73) Safran Transmission Systems                                                                                       |
| (11) EP3759376                                       |                                                                                        | (72) SIMON, Adrien, Louis                                                                                              |
| (21) EP19789842.2                                    |                                                                                        | CHARRIER, Mathieu, Jean                                                                                                |
| (47) 14.07.2021                                      |                                                                                        |                                                                                                                        |
| (87) US2019053644                                    |                                                                                        |                                                                                                                        |



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|------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| DI GIOVANNI, Jean-Charles, Michel,<br>Pierre<br>LEFEBVRE, Simon, Loïc, Clément<br>ROBINET, Guillaume, Jean, Pierre                       | (54) WORK VEHICLE AND METHOD FOR<br>CONTROLLING WORK VEHICLE                        | F16K 31/60<br>F16K 35/02<br>F16K 35/14<br>F17C 13/04                                                 |
| (31) 1901521                                                                                                                             | (73) Komatsu Ltd.                                                                   | (11) EP3692286                                                                                       |
| (32) 14.02.2019                                                                                                                          | (72) OASA, Takahisa                                                                 | (21) EP18762578.5                                                                                    |
| (33) France                                                                                                                              | (31) 2017125377                                                                     | (47) 07.07.2021                                                                                      |
| (51) F16H 61/00                                                                                                                          | (32) 27.06.2017                                                                     | (87) FR2018052002                                                                                    |
| (11) EP3705756                                                                                                                           | (33) Japan                                                                          | 11.04.2019                                                                                           |
| (21) EP20160421.2                                                                                                                        | (51) F16H 63/30                                                                     | (22) 02.08.2018                                                                                      |
| (47) 07.07.2021                                                                                                                          | (11) EP3601851                                                                      | (54) VALVE AND RESERVOIR(S) FOR<br>PRESSURIZED FLUID                                                 |
| (22) 02.03.2020                                                                                                                          | (21) EP18713305.3                                                                   | (73) L'AIR LIQUIDE, SOCIÉTÉ ANONYME<br>POUR L'ÉTUDE ET L'EXPLOITATION<br>DES PROCÉDÉS GEORGES CLAUDE |
| (54) HYDRAULIC GEARBOX ACTUATOR<br>AND ASSEMBLY WITH SUCH A<br>GEARBOX ACTUATOR AND A<br>GEARBOX FOR A DRIVE TRAIN OF A<br>MOTOR VEHICLE | (47) 14.07.2021                                                                     | (72) VIGNEROL, Samuel                                                                                |
| (73) FTE automotive GmbH                                                                                                                 | (87) FR2018050476                                                                   | FRENAL, Antoine                                                                                      |
| (72) HEUBNER, Wilhelm                                                                                                                    | 04.10.2018                                                                          | MULLER, Denis                                                                                        |
| (31) 102019105393                                                                                                                        | (22) 01.03.2018                                                                     | PAOLI, Hervé                                                                                         |
| (32) 04.03.2019                                                                                                                          | (54) REDUCED VIBRATION GEARBOX                                                      | LAMIABLE, Morgan                                                                                     |
| (33) Germany                                                                                                                             | (73) PSA Automobiles SA                                                             | BROECHLER, Johan                                                                                     |
| (51) F16H 61/00                                                                                                                          | (72) MATIAS, Carlos                                                                 | DI FILIPPO, Claudio                                                                                  |
| F16H 61/30                                                                                                                               | (31) 1752507                                                                        | (31) 1701024                                                                                         |
| F16H 63/24                                                                                                                               | (32) 27.03.2017                                                                     | 1701025                                                                                              |
| F16H 63/30                                                                                                                               | (33) France                                                                         | (32) 05.10.2017                                                                                      |
| F16H 63/34                                                                                                                               | (51) F16H 63/32                                                                     | 05.10.2017                                                                                           |
| (11) EP3670972                                                                                                                           | (11) EP3362709                                                                      | (33) France                                                                                          |
| (21) EP19216139.6                                                                                                                        | (21) EP16797725.5                                                                   | France                                                                                               |
| (47) 07.07.2021                                                                                                                          | (47) 07.07.2021                                                                     | (51) F16K 5/00                                                                                       |
| (22) 13.12.2019                                                                                                                          | (87) DE2016200462                                                                   | F28D 7/02                                                                                            |
| (54) HYDRAULIC OPERATING APPARATUS<br>FOR THE OPERATION OF ACTUATING<br>ELEMENTS IN A MOTOR VEHICLE<br>TRANSMISSION                      | 20.04.2017                                                                          | F28D 7/10                                                                                            |
| (73) FTE automotive GmbH                                                                                                                 | (22) 05.10.2016                                                                     | F28D 21/00                                                                                           |
| (72) STÖSSEL, Roland                                                                                                                     | (54) SHIFT FORK FOR A MOTOR VEHICLE<br>TRANSMISSION                                 | F28F 27/02                                                                                           |
| STÖHR, Reinhold                                                                                                                          | (73) Schaeffler Technologies AG & Co. KG                                            | F02M 26/22                                                                                           |
| (31) 102018009852                                                                                                                        | (72) SCHULTE, Andreas                                                               | (11) EP3635320                                                                                       |
| (32) 19.12.2018                                                                                                                          | (31) 102015220158                                                                   | (21) EP18728066.4                                                                                    |
| (33) Germany                                                                                                                             | (32) 16.10.2015                                                                     | (47) 07.07.2021                                                                                      |
| (51) F16H 61/00                                                                                                                          | (33) Germany                                                                        | (87) EP2018063265                                                                                    |
| F16H 61/4035                                                                                                                             | (51) F16H 63/34                                                                     | 13.12.2018                                                                                           |
| (11) EP3685075                                                                                                                           | (11) EP3670974                                                                      | (22) 22.05.2018                                                                                      |
| (21) EP18800692.8                                                                                                                        | (21) EP19216142.0                                                                   | (54) DEVICE FOR RECOVERING HEAT<br>FROM A HEATING FLUID                                              |
| (47) 07.07.2021                                                                                                                          | (47) 07.07.2021                                                                     | (73) Volkswagen Aktiengesellschaft                                                                   |
| (87) FR2018052294                                                                                                                        | (22) 13.12.2019                                                                     | (72) GOCKEL, Jens                                                                                    |
| 28.03.2019                                                                                                                               | (54) ELECTROMECHANICAL PARKING-<br>LOCK ACTUATOR                                    | LÄMMER, Hilmar                                                                                       |
| (22) 20.09.2018                                                                                                                          | (73) FTE automotive GmbH                                                            | URBAN, Christian                                                                                     |
| (54) SUPPLY UNIT FOR AT LEAST ONE<br>HYDRAULIC MACHINE                                                                                   | (72) LENKE, Sonja                                                                   | (31) 102017209725                                                                                    |
| (73) Poclain Hydraulics Industrie                                                                                                        | (31) 102018133269                                                                   | (32) 08.06.2017                                                                                      |
| (72) DEL MASTRO, Alessio                                                                                                                 | (32) 20.12.2018                                                                     | (33) Germany                                                                                         |
| KUBAN, Viktor                                                                                                                            | (33) Germany                                                                        | (51) F16K 5/04                                                                                       |
| LUCIENNE, Philippe                                                                                                                       | (51) F16J 9/28                                                                      | F16K 11/085                                                                                          |
| DEPIERRE, Gery                                                                                                                           | (11) EP3642514                                                                      | (11) EP2759747                                                                                       |
| (31) 1758805                                                                                                                             | (21) EP18732336.5                                                                   | (21) EP13153005.7                                                                                    |
| (32) 22.09.2017                                                                                                                          | (47) 14.07.2021                                                                     | (47) 07.07.2021                                                                                      |
| (33) France                                                                                                                              | (87) EP2018066126                                                                   | (22) 29.01.2013                                                                                      |
| (51) F16H 61/421                                                                                                                         | 27.12.2018                                                                          | (54) Liquid valve                                                                                    |
| F16H 61/431                                                                                                                              | (22) 18.06.2018                                                                     | (73) ESBE AB                                                                                         |
| F16H 61/472                                                                                                                              | (54) PISTON RING, USE OF A PISTON<br>RING AND METHOD FOR PRODUCING<br>A PISTON RING | (72) Davidsson, Jonas                                                                                |
| (11) EP3553347                                                                                                                           | (73) Deutsches Zentrum für Luft- und<br>Raumfahrt e.V.                              | (51) F16K 7/16                                                                                       |
| (21) EP18823198.9                                                                                                                        | (72) VIRSIK, Roman                                                                  | F16K 7/17                                                                                            |
| (47) 07.07.2021                                                                                                                          | KOCH, Dietmar                                                                       | (11) EP3614025                                                                                       |
| (87) JP2018020537                                                                                                                        | ORTELT, Markus                                                                      | (21) EP19192259.0                                                                                    |
| 03.01.2019                                                                                                                               | (31) 102017113433                                                                   | (47) 07.07.2021                                                                                      |
| (22) 29.05.2018                                                                                                                          | (32) 19.06.2017                                                                     | (22) 19.08.2019                                                                                      |
|                                                                                                                                          | (33) Germany                                                                        | (54) TWO-WAY VALVE                                                                                   |
|                                                                                                                                          | (51) F16K 1/30                                                                      | (73) SMC Corporation                                                                                 |
|                                                                                                                                          | F16K 1/44                                                                           | (72) DOI, Yoshitada                                                                                  |
|                                                                                                                                          | F16K 31/524                                                                         | OKITA, Yuzuru                                                                                        |

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|------------------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| SUZUKI, Takamitsu                                                            | (73) Forbes Marshall Private Limited                | (73) HARTING Electric GmbH & Co. KG                                                                                                                |
| NAGATA, Akinori                                                              | (72) JOSEPH, Ronnie                                 | (72) Schönfeld, Alexander                                                                                                                          |
| (31) 2018155928                                                              | JOSHI, Milind                                       | Schnieder, Stefan                                                                                                                                  |
| (32) 23.08.2018                                                              | (31) 201621033189                                   | (31) 102018101790                                                                                                                                  |
| (33) Japan                                                                   | (32) 28.09.2016                                     | (32) 26.01.2018                                                                                                                                    |
| (51) F16K 11/044                                                             | (33) India                                          | (33) Germany                                                                                                                                       |
| (11) EP2660495                                                               | (51) F16K 37/00                                     | (51) F16L 9/17                                                                                                                                     |
| (21) EP12290154.9                                                            | G01D 5/14                                           | F22G 7/00                                                                                                                                          |
| (47) 07.07.2021                                                              | G01D 5/245                                          | F27D 17/00                                                                                                                                         |
| (22) 04.05.2012                                                              | G05B 1/00                                           | F28D 21/00                                                                                                                                         |
| (54) Control valve unit of a liquid circuit of an internal combustion engine | H02P 6/16                                           | F28F 19/00                                                                                                                                         |
| (73) THERMAL CONTROL SYSTEMS                                                 | (11) EP3372882                                      | F28F 21/08                                                                                                                                         |
| AUTOMOTIVE (TCFR)                                                            | (21) EP18161008.0                                   | (11) EP3499172                                                                                                                                     |
| (72) Marimbordes, Thierry                                                    | (47) 07.07.2021                                     | (21) EP17206724.1                                                                                                                                  |
| (51) F16K 11/074                                                             | (22) 09.03.2018                                     | (47) 14.07.2021                                                                                                                                    |
| F16K 31/385                                                                  | (54) CONTROL VALVE POSITIONING SYSTEM               | (22) 12.12.2017                                                                                                                                    |
| F16K 31/524                                                                  | (73) Hamilton Sundstrand Corporation                | (54) SUPERHEATER COMPRISING A PIPE ASSEMBLY EXPOSED TO COMBUSTION GASES CONTAINING LONG SEAM WELDED TUBES FOR STEAM GENERATOR WITH CORROSIVE GASES |
| (11) EP3537015                                                               | (72) WICHOWSKI, Robert P.                           | (73) Steinhilber Engineering GmbH                                                                                                                  |
| (21) EP16920658.8                                                            | SEARS, Patrick J.                                   | (72) Schadow, Uwe                                                                                                                                  |
| (47) 14.07.2021                                                              | MUGURUSA, Diego S.                                  | Streib, Rolf                                                                                                                                       |
| (87) CN2016112350                                                            | ROBERTS, Timothy A.                                 |                                                                                                                                                    |
| 11.05.2018                                                                   | (31) 201715455174                                   |                                                                                                                                                    |
| (22) 27.12.2016                                                              | (32) 10.03.2017                                     |                                                                                                                                                    |
| (54) SWITCHING VALVE CORE FOR WATER SHUTOFF                                  | (33) United States of America                       |                                                                                                                                                    |
| (73) Xiamen Solax High-Tech Industries Co., Ltd.                             | (51) F16L 1/23                                      | (51) F16L 21/06                                                                                                                                    |
| (72) WEI, Zhijian                                                            | (11) EP3507531                                      | F16L 23/08                                                                                                                                         |
| LIN, Fangqi                                                                  | (21) EP17762233.9                                   | F16L 33/04                                                                                                                                         |
| LIN, Wenyan                                                                  | (47) 07.07.2021                                     | (11) EP3670989                                                                                                                                     |
| TAN, Weiliang                                                                | (87) NL2017050563                                   | (21) EP19216418.4                                                                                                                                  |
| (31) 201610976460                                                            | 08.03.2018                                          | (47) 14.07.2021                                                                                                                                    |
| 201621199820 U                                                               | (22) 28.08.2017                                     | (22) 16.12.2019                                                                                                                                    |
| (32) 07.11.2016                                                              | (54) MARINE PIPELAYING FRICTION CLAMP DEVICE        | (54) CLAMPING DEVICE COMPRISING A BELT AND TWO FITTED TIGHTENING LUGS                                                                              |
| 07.11.2016                                                                   | (73) Itrec B.V.                                     |                                                                                                                                                    |
| (33) China                                                                   | (72) DONKERS, Jeroen Adrianus Joseph                | (73) Caillau                                                                                                                                       |
| China                                                                        | VEHMEIJER, Terence Willem August                    | (72) RIGOLLET, Nicolas                                                                                                                             |
|                                                                              | VAN RUYVEN, Stefan Cornelis                         | CLERC, Dylan                                                                                                                                       |
| (51) F16K 17/38                                                              | ROODENBURG, Joop                                    | (31) 1873093                                                                                                                                       |
| F16K 17/40                                                                   | SLOB, Wouter Johannes                               | (32) 17.12.2018                                                                                                                                    |
| (11) EP3517809                                                               |                                                     | (33) France                                                                                                                                        |
| (21) EP17852887.3                                                            | (31) 2017396                                        |                                                                                                                                                    |
| (47) 07.07.2021                                                              | (32) 30.08.2016                                     | (51) F16L 27/08                                                                                                                                    |
| (87) JP2017032779                                                            | (33) Netherlands                                    | F16L 27/12                                                                                                                                         |
| 29.03.2018                                                                   | (51) F16L 3/10                                      | F16L 51/00                                                                                                                                         |
| (22) 12.09.2017                                                              | F16L 5/00                                           | F16L 51/02                                                                                                                                         |
| (54) GLASS BALL SAFETY VALVE                                                 | F16L 55/035                                         | (11) EP3736479                                                                                                                                     |
| (73) Kawasaki Jukogyo Kabushiki Kaisha                                       | (11) EP3698076                                      | (21) EP19717958.3                                                                                                                                  |
| (72) KATO, Kodai                                                             | (21) EP18812349.1                                   | (47) 14.07.2021                                                                                                                                    |
| SUZUKI, Yutaka                                                               | (47) 14.07.2021                                     | (87) ES2019070103                                                                                                                                  |
| NINOMIYA, Makoto                                                             | (87) NL2018050677                                   | 19.09.2019                                                                                                                                         |
| OKAMOTO, Masayoshi                                                           | 25.04.2019                                          | (22) 22.02.2019                                                                                                                                    |
| (31) 2016184111                                                              | (22) 15.10.2018                                     | (54) EXPANSION-COMPENSATING ELEMENT                                                                                                                |
| (32) 21.09.2016                                                              | (54) RISER CLAMP WITH A VIBRATION ISOLATION ELEMENT | (73) ABN Pipe Systems, S.L.U.                                                                                                                      |
| (33) Japan                                                                   | (73) J. van Walraven Holding B.V.                   | (72) VAZQUEZ SANCHEZ, Javier Antonio                                                                                                               |
| (51) F16K 31/18                                                              | (72) NIJDAM, Frank                                  | ROSA ARIZA, David                                                                                                                                  |
| F16K 31/26                                                                   | JUZAK, Marek                                        | (31) 201830243                                                                                                                                     |
| F28B 9/08                                                                    | (31) 2019747                                        | (32) 12.03.2018                                                                                                                                    |
| F28F 17/00                                                                   | (32) 17.10.2017                                     | (33) Spain                                                                                                                                         |
| (11) EP3519749                                                               | (33) Netherlands                                    |                                                                                                                                                    |
| (21) EP17855116.4                                                            | (51) F16L 5/10                                      | (51) F16L 37/00                                                                                                                                    |
| (47) 07.07.2021                                                              | H02G 3/22                                           | F16L 37/098                                                                                                                                        |
| (87) IB2017055886                                                            | (11) EP3517816                                      | F16L 37/14                                                                                                                                         |
| 05.04.2018                                                                   | (21) EP19000006.7                                   | F16L 41/08                                                                                                                                         |
| (22) 27.09.2017                                                              | (47) 07.07.2021                                     | F24D 19/00                                                                                                                                         |
| (54) AN ARRANGEMENT FOR REMOVING CONDENSATE FROM A HEAT EXCHANGER            | (22) 08.01.2019                                     | F28F 9/02                                                                                                                                          |
|                                                                              | (54) CONNECTOR WITH CONNECTOR HOUSING               | (11) EP3486596                                                                                                                                     |
|                                                                              |                                                     | (21) EP18460013.8                                                                                                                                  |
|                                                                              |                                                     | (47) 14.07.2021                                                                                                                                    |

|                                                                                                         |                                                                                   |                                                                                                               |
|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| (22) 27.02.2018                                                                                         | YOUN, Deokhyun                                                                    | G03B 17/56                                                                                                    |
| (54) A PIPE FITTING FOR CONNECTING<br>PIPES TO A DEVICE, ESPECIALLY A<br>STUB PIPE FOR A HEAT EXCHANGER | LEE, Sungsub                                                                      | (11) EP3033563                                                                                                |
| (73) AIC Spółka Akcyjna                                                                                 | (31) 20150109725                                                                  | (21) EP14750769.3                                                                                             |
| (72) Kuzma, Mariusz                                                                                     | (32) 03.08.2015                                                                   | (47) 14.07.2021                                                                                               |
| Oryl, Michal                                                                                            | (33) Korea (Republic)                                                             | (87) EP2014067518                                                                                             |
| Wantoch-Rekowski, Daniel                                                                                | (51) F16L 59/065                                                                  | 19.02.2015                                                                                                    |
| (31) 42069317                                                                                           | F25D 19/00                                                                        | (22) 15.08.2014                                                                                               |
| (32) 01.03.2017                                                                                         | F25D 23/02                                                                        | (54) HAND-HELD OR VEHICLE MOUNTED<br>CAMERA STABILIZATION SYSTEM                                              |
| (33) Poland                                                                                             | F25D 23/06                                                                        | (73) Freefly Systems Inc.                                                                                     |
| (51) F16L 37/088                                                                                        | (11) EP3332185                                                                    | (72) FIRCHAU, Tabb                                                                                            |
| (11) EP3652476                                                                                          | (21) EP16833309.4                                                                 | BLOOMFIELD, David                                                                                             |
| (21) EP18720243.7                                                                                       | (47) 14.07.2021                                                                   | COLTON, Shane                                                                                                 |
| (47) 14.07.2021                                                                                         | (87) KR2016008466                                                                 | ROPER, Ian                                                                                                    |
| (87) EP2018060652                                                                                       | 09.02.2017                                                                        | (31) 201361866440 P                                                                                           |
| 17.01.2019                                                                                              | (22) 01.08.2016                                                                   | (32) 15.08.2013                                                                                               |
| (22) 26.04.2018                                                                                         | (54) VACUUM ADIABATIC BODY AND<br>REFRIGERATOR                                    | (33) United States of America                                                                                 |
| (54) PLUG-IN COUPLING FOR A FLUID<br>LINE                                                               | (73) LG Electronics Inc.                                                          | (51) F16M 11/10                                                                                               |
| (73) ContiTech MGW GmbH                                                                                 | (72) JUNG, Wonyeong                                                               | F16M 11/18                                                                                                    |
| (72) ALVENSLEBEN, Holger                                                                                | YOUN, Deokhyun                                                                    | F16M 11/20                                                                                                    |
| (31) 102017212004                                                                                       | KIM, Daewoong                                                                     | F16M 13/02                                                                                                    |
| (32) 13.07.2017                                                                                         | (31) 20150109728                                                                  | G09F 9/302                                                                                                    |
| (33) Germany                                                                                            | (32) 03.08.2015                                                                   | G09F 15/00                                                                                                    |
| (51) F16L 58/10                                                                                         | (33) Korea (Republic)                                                             | G09F 19/02                                                                                                    |
| (11) EP3176487                                                                                          | (51) F16M 11/04                                                                   | (11) EP3571688                                                                                                |
| (21) EP16196698.1                                                                                       | F16M 11/10                                                                        | (21) EP18700539.2                                                                                             |
| (47) 07.07.2021                                                                                         | F16M 11/12                                                                        | (47) 07.07.2021                                                                                               |
| (22) 07.12.2012                                                                                         | F16M 11/18                                                                        | (87) EP2018050272                                                                                             |
| (54) METHOD FOR COATING TUBES                                                                           | F16M 11/20                                                                        | 12.07.2018                                                                                                    |
| (73) MV Pipe Technologies GmbH                                                                          | F16M 13/00                                                                        | (22) 05.01.2018                                                                                               |
| (72) Rönpagel, Andreas                                                                                  | G03B 17/56                                                                        | (54) MONITOR SYSTEM                                                                                           |
| Steinhoff, Michael                                                                                      | (11) EP3564573                                                                    | (73) Simtec Systems GmbH                                                                                      |
| (31) 12153964                                                                                           | (21) EP16925327.5                                                                 | (72) KAUFMANN, Bernd                                                                                          |
| (32) 05.02.2012                                                                                         | (47) 14.07.2021                                                                   | (31) 17150544                                                                                                 |
| (33) European Patent Office (EPO)                                                                       | (87) CN2016112804                                                                 | (32) 06.01.2017                                                                                               |
| (51) F16L 59/04                                                                                         | 05.07.2018                                                                        | (33) European Patent Office (EPO)                                                                             |
| F24C 15/08                                                                                              | (22) 28.12.2016                                                                   | (51) F16M 11/10                                                                                               |
| F24C 15/34                                                                                              | (54) PAN-TILT LOAD MOUNTING<br>ASSEMBLY, PAN-TILT DEVICE, AND<br>CAMERA APPARATUS | F16M 11/20                                                                                                    |
| (11) EP3491284                                                                                          | (73) SZ DJI Osmo Technology Co., Ltd.                                             | F16M 11/24                                                                                                    |
| (21) EP17757790.5                                                                                       | (72) ZHAO, Yanchong                                                               | F16M 13/02                                                                                                    |
| (47) 14.07.2021                                                                                         | LIU, Guoyao                                                                       | (11) EP3564572                                                                                                |
| (87) FR2017051956                                                                                       | (51) F16M 11/04                                                                   | (21) EP19172279.2                                                                                             |
| 08.02.2018                                                                                              | F16M 11/12                                                                        | (47) 07.07.2021                                                                                               |
| (22) 18.07.2017                                                                                         | F16M 13/02                                                                        | (22) 02.05.2019                                                                                               |
| (54) INSULATION METHOD AND<br>APPLIANCE OBTAINED                                                        | (11) EP3631276                                                                    | (54) DEVICE FOR MOUNTING A<br>VIEWING SCREEN SO AS TO BE<br>DISPLACEABLE WITH RESPECT TO<br>THE OUTSIDE WORLD |
| (73) SAINT-GOBAIN ISOVER                                                                                | (21) EP18727669.6                                                                 | (73) In 2 Home B.V.                                                                                           |
| (72) BAREYT, Christophe                                                                                 | (47) 14.07.2021                                                                   | (72) LANGIUS, Roelof Hendrik                                                                                  |
| GOGÉON, David                                                                                           | (87) DK2018050110                                                                 | (31) 2020883                                                                                                  |
| (31) 1657467                                                                                            | 29.11.2018                                                                        | (32) 04.05.2018                                                                                               |
| (32) 01.08.2016                                                                                         | (22) 18.05.2018                                                                   | (33) Netherlands                                                                                              |
| (33) France                                                                                             | (54) AN ADJUSTABLE MOUNT FOR AN<br>IMAGE PROJECTOR                                | (51) F16N 7/38                                                                                                |
| (51) F16L 59/065                                                                                        | (73) DNP Denmark A/S                                                              | F16N 11/04                                                                                                    |
| F25D 19/00                                                                                              | (72) LINDEGAARD, Søren Weis                                                       | F16N 13/16                                                                                                    |
| F25D 23/02                                                                                              | CHABOKIRAYENI, Behnam                                                             | F16N 19/00                                                                                                    |
| F25D 23/06                                                                                              | JENSEN, Johnny                                                                    | F16N 25/02                                                                                                    |
| (11) EP3332186                                                                                          | FRANDSEN, Jens Krabbe                                                             | (11) EP3212985                                                                                                |
| (21) EP16833311.0                                                                                       | SMEDEGAARD, Mike Fabricius                                                        | (21) EP15855553.2                                                                                             |
| (47) 14.07.2021                                                                                         | NIELSEN, Ebbe Folke                                                               | (47) 14.07.2021                                                                                               |
| (87) KR2016008468                                                                                       | (31) PA201770363                                                                  | (87) FI2015050750                                                                                             |
| 09.02.2017                                                                                              | (32) 22.05.2017                                                                   | 06.05.2016                                                                                                    |
| (22) 01.08.2016                                                                                         | (33) Denmark                                                                      | (22) 30.10.2015                                                                                               |
| (54) VACUUM ADIABATIC BODY AND<br>REFRIGERATOR                                                          | (51) F16M 11/04                                                                   | (54) AUTOMATIC LUBRICATION SYSTEM<br>AND METHOD FOR LUBRICATING<br>PARTS                                      |
| (73) LG Electronics Inc.                                                                                | F16M 11/18                                                                        | (73) Moksi, Jukka                                                                                             |
| (72) JUNG, Wonyeong                                                                                     | F16M 11/20                                                                        |                                                                                                               |
|                                                                                                         | F16M 11/24                                                                        |                                                                                                               |

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|------------------------------------------|-------------------------------------------|------------------------------------------------|
| (72) Moksi, Jukka                        | (31) PA201770361                          | Germany                                        |
| (31) 20140300                            | (32) 22.05.2017                           | (51) F21S 8/02                                 |
| 20155437                                 | (33) Denmark                              | F21V 5/04                                      |
| (32) 30.10.2014                          | (51) F17C 5/06                            | F21V 7/00                                      |
| 09.06.2015                               | F17C 7/00                                 | F21V 7/04                                      |
| (33) Finland                             | F17C 13/04                                | F21V 13/04                                     |
| Finland                                  | (11) EP2778500                            | F21Y 115/10                                    |
| (51) F16N 11/08                          | (21) EP13159212.3                         | (11) EP3631287                                 |
| F16N 13/06                               | (47) 07.07.2021                           | (21) EP18724571.7                              |
| F16N 13/10                               | (22) 14.03.2013                           | (47) 07.07.2021                                |
| F16N 13/14                               | (54) Method for operating a pressure tank | (87) EP2018063133                              |
| F16N 23/00                               | device and pressure tank device           | 29.11.2018                                     |
| F16N 31/02                               | (73) Magna Steyr Fahrzeugtechnik AG & Co  | (22) 18.05.2018                                |
| (11) EP3115675                           | KG                                        | (54) LUMINAIRE                                 |
| (21) EP15759295.7                        | (72) Maurer, Johannes                     | (73) Signify Holding B.V.                      |
| (47) 07.07.2021                          | Stübing, Andreas                          | (72) Li, Qin                                   |
| (87) KR2015002152                        | Zmugg, Rudolf                             | MA, Wil                                        |
| 11.09.2015                               | (51) F17C 13/00                           | HUANG, Zhong                                   |
| (22) 05.03.2015                          | (11) EP3631283                            | ZHOU, Liang                                    |
| (54) LUBRICANT INJECTOR                  | (21) EP18736985.5                         | BAO, Jing                                      |
| (73) KLT Co. Ltd.                        | (47) 14.07.2021                           | LUO, Lora                                      |
| (72) YANG, Yun jong                      | (87) FR2018051255                         | (31) PCT/CN2017/085914                         |
| (31) 20140026955                         | 06.12.2018                                | 17179357                                       |
| (32) 07.03.2014                          | (22) 31.05.2018                           | (32) 25.05.2017                                |
| (33) Korea (Republic)                    | (54) SEALED AND THERMALLY                 | 03.07.2017                                     |
| (51) F16P 3/14                           | INSULATING TANK                           | (33) World Intellectual Property Office (WIPO) |
| G01V 8/12                                | (73) Gaztransport et Technigaz            | European Patent Office (EPO)                   |
| (11) EP2790040                           | (72) LECONTE, Christophe                  | (51) F21S 8/02                                 |
| (21) EP13162699.6                        | DETAILLE, Geoffrey                        | F21V 21/04                                     |
| (47) 14.07.2021                          | MERZEAUD, Jean-Guillaume                  | F21V 29/00                                     |
| (22) 08.04.2013                          | (31) 20170068552                          | (11) EP2153115                                 |
| (54) System and method for configuring a | 1760509                                   | (21) EP08747545.5                              |
| surveillance area of an optoelectronic   | (32) 01.06.2017                           | (47) 07.07.2021                                |
| monitoring device                        | 08.11.2017                                | (87) US2008062488                              |
| (73) SICK AG                             | (33) Korea (Republic)                     | 13.11.2008                                     |
| (72) Haberer, Manfred                    | France                                    | (22) 02.05.2008                                |
| (51) F17C 3/04                           | (51) F17C 13/00                           | (54) LED-BASED FIXTURES AND                    |
| F17C 3/08                                | G01D 11/30                                | RELATED METHODS FOR THERMAL                    |
| (11) EP2990715                           | (11) EP3620756                            | MANAGEMENT                                     |
| (21) EP14787872.2                        | (21) EP18193566.9                         | (73) Signify Holding B.V.                      |
| (47) 14.07.2021                          | (47) 14.07.2021                           | (72) ROBERGE, Brian                            |
| (87) JP2014002222                        | (22) 10.09.2018                           | ROBERTS, Ron                                   |
| 30.10.2014                               | (54) PRESSURE-RESISTANT HOUSING           | SHIKH, Igor                                    |
| (22) 21.04.2014                          | WITH ELECTRICITY FEED-THROUGH             | LYS, Ihor, A.                                  |
| (54) DOUBLE-SHELL SHIP TANK              | (73) Deutsches Institut für               | KOERNER, Brad                                  |
| STRUCTURE AND LIQUEFIED GAS              | Lebensmitteltechnik e.V.                  | MOLLNOW, Tomas                                 |
| CARRIER                                  | (72) Hukelmann, Bernhard                  | (31) 916053 P                                  |
| (73) Kawasaki Jukogyo Kabushiki Kaisha   | (51) F21S 2/00                            | 916496 P                                       |
| (72) URAGUCHI, Ryosuke                   | H05B 33/08                                | 984855 P                                       |
| YOSHIDA, Takumi                          | H05B 45/10                                | (32) 04.05.2007                                |
| MURAKAMI, Asako                          | H05B 45/37                                | 07.05.2007                                     |
| IZUMI, Naruyoshi                         | H05B 45/58                                | 02.11.2007                                     |
| OKUMURA, Kentaro                         | H05B 47/11                                | (33) United States of America                  |
| MURAGISHI, Osamu                         | H05B 47/21                                | United States of America                       |
| (31) 2013090098                          | (11) EP3142464                            | United States of America                       |
| (32) 23.04.2013                          | (21) EP16187976.2                         | (51) F21S 9/02                                 |
| (33) Japan                               | (47) 14.07.2021                           | H02J 9/06                                      |
| (51) F17C 5/06                           | (22) 09.09.2016                           | H05B 45/00                                     |
| (11) EP3631282                           | (54) LIGHTING SYSTEM                      | H05B 45/10                                     |
| (21) EP18727671.2                        | (73) Tridonic GmbH & Co KG                | H05B 47/19                                     |
| (47) 07.07.2021                          | (72) Koch, Patrik Yves                    | (11) EP2567441                                 |
| (87) DK2018050113                        | Schmidt, Gabor                            | (21) EP11778102.1                              |
| 29.11.2018                               | (31) 102015217392                         | (47) 07.07.2021                                |
| (22) 18.05.2018                          | 102015225978                              | (87) US2011034802                              |
| (54) METHOD OF REFUELING A               | (32) 11.09.2015                           | 10.11.2011                                     |
| HYDROGEN VEHICLE                         | 18.12.2015                                | (22) 02.05.2011                                |
| (73) Nel Hydrogen A/S                    | (33) Germany                              | (54) WIRELESS LIGHTING DEVICES AND             |
| (72) SINDING, Claus Due                  |                                           | GRID-SHIFTING APPLICATIONS                     |

|                                                                                                                                     |                                                                        |                                                                                 |
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| (73) Wireless Environment, LLC                                                                                                      | F21S 41/176                                                            | (54) HYBRID OPTICS LED HEADLAMP                                                 |
| (72) RECKER, Michael V.<br>LEVINE, David B.                                                                                         | F21S 41/26                                                             | (73) Magna International Inc.                                                   |
| (31) 772563                                                                                                                         | F21S 41/365                                                            | (72) WOODWARD, Ronald O.                                                        |
| (32) 03.05.2010                                                                                                                     | F21S 41/37                                                             | (31) 201161516798 P                                                             |
| (33) United States of America                                                                                                       | F21S 43/16                                                             | (32) 07.04.2011                                                                 |
| (51) F21S 41/14                                                                                                                     | F21S 43/20                                                             | (33) United States of America                                                   |
| F21S 41/143                                                                                                                         | F21S 43/31                                                             | (51) F21V 7/04                                                                  |
| F21S 41/151                                                                                                                         | F21V 7/26                                                              | F21V 8/00                                                                       |
| F21S 41/25                                                                                                                          | (11) EP3228926                                                         | F21S 43/241                                                                     |
| F21S 41/26                                                                                                                          | (21) EP17162309.3                                                      | F21S 43/243                                                                     |
| F21S 41/27                                                                                                                          | (47) 07.07.2021                                                        | F21S 43/249                                                                     |
| F21S 41/663                                                                                                                         | (22) 22.03.2017                                                        | F21S 43/31                                                                      |
| (11) EP3505814                                                                                                                      | (54) LIGHTING DEVICE FOR VEHICLE                                       | (11) EP2372234                                                                  |
| (21) EP18248298.4                                                                                                                   | (73) LG Electronics Inc.                                               | (21) EP11156551.1                                                               |
| (47) 07.07.2021                                                                                                                     | (72) PARK, Jun                                                         | (47) 07.07.2021                                                                 |
| (22) 28.12.2018                                                                                                                     | (31) 201662314544 P                                                    | (22) 02.03.2011                                                                 |
| (54) VEHICULAR LAMP                                                                                                                 | 20160071937                                                            | (54) Illumination device                                                        |
| (73) STANLEY ELECTRIC CO., LTD.                                                                                                     | (32) 29.03.2016                                                        | (73) HELLA GmbH & Co. KGaA                                                      |
| (72) NISHIMURA, Shota                                                                                                               | 09.06.2016                                                             | (72) Mügge, Martin                                                              |
| KAMIOKA, Kazuma                                                                                                                     | (33) United States of America                                          | (31) 102010012747                                                               |
| (31) 2017254074                                                                                                                     | Korea (Republic)                                                       | (32) 25.03.2010                                                                 |
| (32) 28.12.2017                                                                                                                     | (51) F21V 3/02                                                         | (33) Germany                                                                    |
| (33) Japan                                                                                                                          | F21V 7/10                                                              | (51) F21V 7/10                                                                  |
| (51) F21S 41/14                                                                                                                     | F21V 3/00                                                              | F21V 8/00                                                                       |
| F21S 41/143                                                                                                                         | F21V 3/04                                                              | G02B 5/02                                                                       |
| F21S 41/16                                                                                                                          | F21V 14/00                                                             | G02B 1/10                                                                       |
| F21S 41/176                                                                                                                         | (11) EP3469251                                                         | G02B 1/11                                                                       |
| F21S 41/20                                                                                                                          | (21) EP17810670.4                                                      | (11) EP2752686                                                                  |
| F21S 41/27                                                                                                                          | (47) 07.07.2021                                                        | (21) EP13195447.1                                                               |
| F21S 41/32                                                                                                                          | (87) US2017027984                                                      | (47) 07.07.2021                                                                 |
| F21S 41/365                                                                                                                         | 14.12.2017                                                             | (22) 03.12.2013                                                                 |
| F21S 41/43                                                                                                                          | (22) 17.04.2017                                                        | (54) Display device and method for fabricating<br>reflective sheet for the same |
| F21S 41/663                                                                                                                         | (54) INTEGRATING POINT SOURCE FOR<br>TEXTURE PROJECTING BULB           | (73) LG Display Co., Ltd.                                                       |
| (11) EP3545229                                                                                                                      | (73) Magic Leap, Inc.                                                  | (72) Lee, Sang-Hyun                                                             |
| (21) EP17787308.0                                                                                                                   | (72) KAEHLER, Adrian                                                   | Kim, Byoung-Ku                                                                  |
| (47) 14.07.2021                                                                                                                     | BRADSKI, Gary                                                          | Moon, Won-Taek                                                                  |
| (87) AT2017060260                                                                                                                   | (31) 201662348634 P                                                    | Kim, Bo-Ra                                                                      |
| 31.05.2018                                                                                                                          | (32) 10.06.2016                                                        | Chang, Su-Jin                                                                   |
| (22) 11.10.2017                                                                                                                     | (33) United States of America                                          | (31) 20120146893                                                                |
| (54) LIGHTING DEVICE OF A VEHICLE<br>HEADLAMP                                                                                       | (51) F21V 7/00                                                         | 20130094372                                                                     |
| (73) ZKW Group GmbH                                                                                                                 | F21V 7/06                                                              | (32) 14.12.2012                                                                 |
| (72) ZORN, Jürgen                                                                                                                   | F21V 29/51                                                             | 08.08.2013                                                                      |
| (31) 510572016                                                                                                                      | F21V 29/71                                                             | (33) Korea (Republic)                                                           |
| (32) 22.11.2016                                                                                                                     | (11) EP3685098                                                         | Korea (Republic)                                                                |
| (33) Austria                                                                                                                        | (21) EP18773923.0                                                      | (51) F21V 8/00                                                                  |
| (51) F21S 41/148                                                                                                                    | (47) 07.07.2021                                                        | G02F 1/1333                                                                     |
| F21S 41/19                                                                                                                          | (87) AT2018060208                                                      | G02F 1/13357                                                                    |
| F21S 41/29                                                                                                                          | 28.03.2019                                                             | (11) EP3287693                                                                  |
| F21S 41/39                                                                                                                          | (22) 12.09.2018                                                        | (21) EP17186555.3                                                               |
| F21S 41/47                                                                                                                          | (54) ILLUMINATION MODULE FOR<br>EMITTING LIGHT DIRECTED IN<br>PARALLEL | (47) 07.07.2021                                                                 |
| F21S 45/48                                                                                                                          | (73) LITEstudio OG                                                     | (22) 17.08.2017                                                                 |
| (11) EP2966343                                                                                                                      | (72) TSCHAGER, Michael                                                 | (54) BACK LIGHT UNIT AND DISPLAY<br>DEVICE INCLUDING THE SAME                   |
| (21) EP15174168.3                                                                                                                   | WELZ, Thomas                                                           | (73) LG Electronics, Inc.                                                       |
| (47) 07.07.2021                                                                                                                     | (31) 508002017                                                         | (72) KIM, Kyoungtae                                                             |
| (22) 26.06.2015                                                                                                                     | (32) 21.09.2017                                                        | BAEK, Sanghun                                                                   |
| (54) LIGHTING MODULE FOR A MOTOR<br>VEHICLE HEADLIGHT WITH<br>POSITIONING MEANS BETWEEN<br>HEAT SINK AND REFLECTOR/CIRCUIT<br>BOARD | (33) Austria                                                           | (31) 20160109103                                                                |
| (73) VALEO VISION                                                                                                                   | (51) F21V 7/00                                                         | (32) 26.08.2016                                                                 |
| (72) MADELAINE, Mehdi                                                                                                               | F21V 13/04                                                             | (33) Korea (Republic)                                                           |
| (31) 1456233                                                                                                                        | F21S 41/14                                                             | (51) F21V 8/00                                                                  |
| (32) 30.06.2014                                                                                                                     | (11) EP2694862                                                         | G02F 1/1333                                                                     |
| (33) France                                                                                                                         | (21) EP12717946.3                                                      | G02F 1/13357                                                                    |
| (51) F21S 41/16                                                                                                                     | (47) 14.07.2021                                                        | (11) EP3364238                                                                  |
|                                                                                                                                     | (87) US2012032467                                                      | (21) EP16838053.3                                                               |
|                                                                                                                                     | 11.10.2012                                                             | (47) 07.07.2021                                                                 |
|                                                                                                                                     | (22) 06.04.2012                                                        | (87) CN2016099914                                                               |
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|                                                                             |                                   |                                                                                                                                                              |
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| (22) 23.09.2016                                                             | (51) F21V 23/04                   | (51) F21V 33/00                                                                                                                                              |
| (54) CURVED SURFACE BACKLIGHT UNIT, MANUFACTURING METHOD AND DISPLAY DEVICE | F21W 131/405                      | H05K 3/32                                                                                                                                                    |
| (73) BOE Technology Group Co., Ltd.                                         | G03B 21/20                        | F21S 2/00                                                                                                                                                    |
| Hefei BOE Optoelectronics Technology Co., Ltd.                              | H01L 33/50                        | F21Y 115/10                                                                                                                                                  |
| (72) ZHANG, Wenhao                                                          | F21Y 113/13                       | G03B 15/05                                                                                                                                                   |
| (31) 201510659402                                                           | F21Y 115/10                       | (11) EP3636988                                                                                                                                               |
| (32) 12.10.2015                                                             | F21V 9/08                         | (21) EP18919402.0                                                                                                                                            |
| (33) China                                                                  | (11) EP3637185                    | (47) 14.07.2021                                                                                                                                              |
| (51) F21V 14/02                                                             | (21) EP19205260.3                 | (87) KR2018011475                                                                                                                                            |
| G02B 19/00                                                                  | (47) 07.07.2021                   | 20.02.2020                                                                                                                                                   |
| G02B 27/00                                                                  | (22) 03.11.2009                   | (22) 28.09.2018                                                                                                                                              |
| G06K 9/00                                                                   | (54) ILLUMINATION DEVICE          | (54) LIGHTING DEVICE EQUIPPED WITH FOLDABLE CIRCUIT WIRE AND LED, AND METHOD FOR MANUFACTURING SAME                                                          |
| G06K 9/20                                                                   | (73) Signify Holding B.V.         | (73) Hyundai Fomex Co., Ltd.                                                                                                                                 |
| H04N 5/225                                                                  | (72) LENDERINK, Egbert            | (72) YOO, Jae Kyun                                                                                                                                           |
| H04N 5/235                                                                  | VAN AS, Marco                     | LEE, Jong Hyuk                                                                                                                                               |
| H04N 5/33                                                                   | VAN DER BURGT, Petrus, J., M.     | (31) 20180095151                                                                                                                                             |
| F21V 14/00                                                                  | (31) 08168442                     | (32) 14.08.2018                                                                                                                                              |
| (11) EP3425564                                                              | (32) 06.11.2008                   | (33) Korea (Republic)                                                                                                                                        |
| (21) EP18170019.6                                                           | (33) European Patent Office (EPO) | (51) F21V 35/00                                                                                                                                              |
| (47) 07.07.2021                                                             | (51) F21V 25/12                   | F23N 5/20                                                                                                                                                    |
| (22) 30.04.2018                                                             | F21V 31/04                        | F23Q 25/00                                                                                                                                                   |
| (54) INFRARED LIGHT SOURCE COMPONENT AND ELECTRONIC DEVICE                  | F21V 23/00                        | (11) EP3491291                                                                                                                                               |
| (73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.                   | F21Y 115/10                       | (21) EP17835392.6                                                                                                                                            |
| (72) ZHOU, Yibao                                                            | (11) EP3631292                    | (47) 14.07.2021                                                                                                                                              |
| (31) 201710553059                                                           | (21) EP18726444.5                 | (87) US2017044535                                                                                                                                            |
| (32) 07.07.2017                                                             | (47) 07.07.2021                   | 01.02.2018                                                                                                                                                   |
| (33) China                                                                  | (87) EP2018063150                 | (22) 28.07.2017                                                                                                                                              |
| (51) F21V 14/06                                                             | 06.12.2018                        | (54) AUTOMATIC FLAME EXTINGUISHER                                                                                                                            |
| F21V 17/02                                                                  | (22) 18.05.2018                   | (73) Easy Life Brands LLC                                                                                                                                    |
| F21V 5/00                                                                   | (54) EXPLOSION-PROOF LUMINAIRE    | (72) SHAHESTA, Gaudioso                                                                                                                                      |
| (11) EP3742047                                                              | (73) R. Stahl Schaltgeräte GmbH   | (31) 201662368049 P                                                                                                                                          |
| (21) EP19175515.6                                                           | (72) RÖSSLER, Klaus               | (32) 28.07.2016                                                                                                                                              |
| (47) 07.07.2021                                                             | (31) 102017112146                 | (33) United States of America                                                                                                                                |
| (22) 21.05.2019                                                             | (32) 01.06.2017                   | (51) F22B 1/28                                                                                                                                               |
| (54) OPTICAL SYSTEM FOR SPOTLIGHT                                           | (33) Germany                      | F22D 5/00                                                                                                                                                    |
| (73) Zumtobel Lighting GmbH                                                 | (51) F21V 33/00                   | F24C 1/00                                                                                                                                                    |
| (72) Eidam, Michael                                                         | H04B 10/116                       | (11) EP2975319                                                                                                                                               |
| (51) F21V 15/04                                                             | F21Y 113/13                       | (21) EP14762583.4                                                                                                                                            |
| H01J 5/48                                                                   | F21Y 115/10                       | (47) 14.07.2021                                                                                                                                              |
| H01J 5/50                                                                   | (11) EP3663645                    | (87) JP2014001439                                                                                                                                            |
| H01J 61/34                                                                  | (21) EP19214014.3                 | 18.09.2014                                                                                                                                                   |
| (11) EP3279920                                                              | (47) 07.07.2021                   | (22) 13.03.2014                                                                                                                                              |
| (21) EP16001700.0                                                           | (22) 06.12.2019                   | (54) VAPOR GENERATION DEVICE                                                                                                                                 |
| (47) 07.07.2021                                                             | (54) LIGHTING DEVICE              | (73) Panasonic Intellectual Property Management Co., Ltd.                                                                                                    |
| (22) 02.08.2016                                                             | (73) ledxon GmbH                  | (72) SHIBUYA, Masaki                                                                                                                                         |
| (54) CENTERING ELEMENT AND FIXING MEANS FOR ELECTRICAL LIGHTING MEANS       | (72) Garufo, Gabriel              | HAYAKAWA, Yuji                                                                                                                                               |
| (73) Peschl Ultraviolet GmbH                                                | Lomborg, Markus                   | ABE, Kuniaki                                                                                                                                                 |
| (72) Peschl, Alexander                                                      | (31) 102018131458                 | (31) 2013051336                                                                                                                                              |
| Peschl, Günther                                                             | (32) 07.12.2018                   | (32) 14.03.2013                                                                                                                                              |
| (51) F21V 21/16                                                             | (33) Germany                      | (33) Japan                                                                                                                                                   |
| F21V 21/38                                                                  | (51) F21V 33/00                   | (51) F22B 37/04                                                                                                                                              |
| (11) EP3722668                                                              | H04R 1/02                         | F22B 37/10                                                                                                                                                   |
| (21) EP19168645.0                                                           | (11) EP3378237                    | (11) EP2598799                                                                                                                                               |
| (47) 07.07.2021                                                             | (21) EP16801018.9                 | (21) EP11745769.7                                                                                                                                            |
| (22) 11.04.2019                                                             | (47) 07.07.2021                   | (47) 07.07.2021                                                                                                                                              |
| (54) SYSTEM COMPRISING AN ILLUMINATION COMPONENT                            | (87) GB2016053583                 | (87) EP2011064110                                                                                                                                            |
| (73) DARK MATTER GmbH                                                       | 26.05.2017                        | 15.03.2012                                                                                                                                                   |
| (72) LANGBEIN, Johannes                                                     | (22) 17.11.2016                   | (22) 16.08.2011                                                                                                                                              |
|                                                                             | (54) LIGHTING AND SOUND SYSTEM    | (54) DEVICE FOR OPERATING A CIRCULATION SYSTEM AND COATING METHOD OF GENERATOR AND/OR TURBINE BLADES AND/OR CONDENSER TUBE SHEETS OF A POWER PLANT CONDENSER |
|                                                                             | (73) Zuma Array Limited           |                                                                                                                                                              |
|                                                                             | (72) COOK, Susan                  |                                                                                                                                                              |
|                                                                             | KELLY, Steven                     |                                                                                                                                                              |
|                                                                             | WARREN, Morten                    |                                                                                                                                                              |
|                                                                             | HWANG, Seong Min                  |                                                                                                                                                              |
|                                                                             | HOGGARTH, Marcus                  |                                                                                                                                                              |
|                                                                             | (31) 201520503                    |                                                                                                                                                              |
|                                                                             | (32) 20.11.2015                   |                                                                                                                                                              |
|                                                                             | (33) United Kingdom               |                                                                                                                                                              |

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| (73) Siemens Energy Global GmbH & Co. KG | F23R 3/34                          | (22) 26.01.2015                        |
| (72) EDER, Florian                       | (11) EP3431879                     | (54) IN-STREAM BURNER MODULE           |
| (31) 102010044859                        | (21) EP18183899.6                  | (73) Fives Pillard                     |
| (32) 09.09.2010                          | (47) 07.07.2021                    | (72) SAID, Fouad                       |
| (33) Germany                             | (22) 17.07.2018                    | RICCI, Louis                           |
| (51) F23B 30/00                          | (54) FUEL INJECTORS AND METHODS OF | BOUDET, Yannick                        |
| F23C 1/00                                | MAKING FUEL INJECTORS              | (31) 1451064                           |
| F23C 1/02                                | (73) Delavan, Inc.                 | (32) 12.02.2014                        |
| F23C 1/04                                | (72) BORROR, Dustin Andrew         | (33) France                            |
| F24H 1/00                                | (31) 201715656714                  | (51) F23J 11/04                        |
| F24H 1/22                                | (32) 21.07.2017                    | F23L 17/00                             |
| (11) EP3176517                           | (33) United States of America      | F23L 17/02                             |
| (21) EP16020471.5                        | (51) F23D 14/04                    | F23L 17/16                             |
| (47) 07.07.2021                          | F23D 14/58                         | (11) EP3428533                         |
| (22) 28.11.2016                          | F23D 14/60                         | (21) EP18190933.4                      |
| (54) METHOD AND DEVICE FOR               | F23D 14/64                         | (47) 07.07.2021                        |
| PRODUCING HEAT                           | F24H 1/12                          | (22) 30.07.2008                        |
| (73) Fuß, Andreas                        | F24H 9/18                          | (54) WASTE GAS DEVICE FOR A            |
| (72) Fuß, Andreas                        | (11) EP3546828                     | COMBUSTION DEVICE IN A VEHICLE         |
| (31) 102015015557                        | (21) EP16854592.9                  | (73) Truma Gerätetechnik GmbH & Co. KG |
| (32) 01.12.2015                          | (47) 07.07.2021                    | (72) Ströhle, Elmar                    |
| (33) Germany                             | (87) CN2016108091                  | Wickelmaier, Peter                     |
| (51) F23C 7/00                           | 31.05.2018                         | (31) 102007039984                      |
| F23C 7/02                                | (22) 30.11.2016                    | (32) 23.08.2007                        |
| F23L 9/02                                | (54) BURNER AND GAS WATER HEATER   | (33) Germany                           |
| F23L 9/04                                | PROVIDED WITH SAME                 | (51) F23M 3/00                         |
| F23N 3/02                                | (73) Wuhu Midea Kitchen and Bath   | F23M 20/00                             |
| F23N 5/00                                | Appliances Mfg. Co., Ltd.          | (11) EP2828580                         |
| G01N 21/49                               | (72) XUE, Chengzhi                 | (21) EP13711042.5                      |
| (11) EP3564583                           | DAI, Xianfeng                      | (47) 14.07.2021                        |
| (21) EP17887456.6                        | LIANG, Guorong                     | (87) EP2013055854                      |
| (47) 07.07.2021                          | (31) 201621280123 U                | 26.09.2013                             |
| (87) JP2017040994                        | 201611059110                       | (22) 20.03.2013                        |
| 05.07.2018                               | 201611059209                       | (54) SIMULTANEOUS BROADBAND            |
| (22) 14.11.2017                          | 201621280019 U                     | DAMPING AT MULTIPLE LOCATIONS          |
| (54) COMBUSTION DEVICE AND BOILER        | 201611059207                       | IN A COMBUSTION CHAMBER                |
| PROVIDED WITH SAME                       | 201621279810 U                     | (73) Ansaldo Energia Switzerland AG    |
| (73) Mitsubishi Power, Ltd.              | (32) 25.11.2016                    | (72) HELLAT, Jaan                      |
| (72) KIYAMA Kenji                        | 25.11.2016                         | BOTHEN, Mirko Ruben                    |
| BABA Akira                               | 25.11.2016                         | SCHUERMANS, Bruno                      |
| KURAMASHI Koji                           | 25.11.2016                         | HUBER, Andreas                         |
| OCHI Kenichi                             | 25.11.2016                         | NOIRAY, Nicolas                        |
| MINE Toshihiko                           | 25.11.2016                         | (31) 12160558                          |
| ONISHI Yasuhito                          | (33) China                         | (32) 21.03.2012                        |
| MIYAKE Seishi                            | China                              | (33) European Patent Office (EPO)      |
| SHII Takayuki                            | China                              | (51) F23M 5/08                         |
| (31) 2016255498                          | China                              | F23R 3/00                              |
| (32) 28.12.2016                          | China                              | F23R 3/06                              |
| (33) Japan                               | China                              | (11) EP3601887                         |
| (51) F23C 99/00                          | (51) F23D 14/06                    | (21) EP18756110.5                      |
| F23R 3/14                                | F23D 14/70                         | (47) 14.07.2021                        |
| F23R 3/28                                | (11) EP3686492                     | (87) US2018044985                      |
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| (21) EP15723415.4                        | (47) 14.07.2021                    | (22) 02.08.2018                        |
| (47) 14.07.2021                          | (22) 22.01.2020                    | (54) MINIMIZATION OF LOW PRESSURE      |
| (87) US2015029864                        | (54) GAS OPERATED FLAME BOWL       | VORTEX IN THE RAIL BETWEEN TWO         |
| 12.11.2015                               | (73) Enders Colsman AG             | ADJACENT LINER PANELS                  |
| (22) 08.05.2015                          | (72) GLOGER, Michael               | (73) Raytheon Technologies Corporation |
| (54) METHOD AND APPARATUS FOR            | (31) 202019100482 U                | (72) XU, JinQuan                       |
| ASSISTING WITH THE COMBUSTION            | (32) 28.01.2019                    | (31) 201715666958                      |
| OF FUEL                                  | (33) Germany                       | (32) 02.08.2017                        |
| (73) FGC Plasma Solutions LLC            | (51) F23D 14/20                    | (33) United States of America          |
| (72) GOMEZ DEL CAMPO, Felipe             | F23R 3/20                          | (51) F23N 1/00                         |
| (31) 201461990314 P                      | (11) EP3105506                     | (11) EP3631297                         |
| (32) 08.05.2014                          | (21) EP15706856.0                  | (21) EP18732922.2                      |
| (33) United States of America            | (47) 07.07.2021                    | (47) 14.07.2021                        |
| (51) F23D 11/38                          | (87) FR2015050176                  | (87) IT2018050092                      |
| F23R 3/28                                | 20.08.2015                         | 29.11.2018                             |

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| (22) 24.05.2018                          | (54) COMBUSTOR LINER PANEL             | (51) F24C 3/08                        |
| (54) AN IMPROVED GAS VALVE UNIT          | ATTACHMENT ASSEMBLY FOR GAS            | F24C 15/32                            |
| (73) E.G.O. Elektro-Gerätebau GmbH       | TURBINE ENGINE                         | (11) EP3483506                        |
| (72) BRATTI, Lorenzo                     | (73) Raytheon Technologies Corporation | (21) EP18209413.6                     |
| LUCHETTA, Paolo                          | (72) WHITE, Kevin W.                   | (47) 14.07.2021                       |
| NOETH, Werner                            | (31) 201816160321                      | (22) 24.07.2014                       |
| (31) 201700057665                        | 201816189730                           | (54) COOKING APPLIANCE                |
| (32) 26.05.2017                          | (32) 15.10.2018                        | (73) LG Electronics Inc.              |
| (33) Italy                               | 13.11.2018                             | (72) WIE, Jaehyuk                     |
| (51) F23N 1/00                           | (33) United States of America          | YANG, Ingyu                           |
| F23N 5/16                                | United States of America               | KIM, Youngsoo                         |
| F23R 3/34                                | (51) F23R 3/28                         | KIM, Yangho                           |
| (11) EP3707432                           | (11) EP2642207                         | (31) 20140039838                      |
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| (47) 07.07.2021                          | (47) 07.07.2021                        | (33) Korea (Republic)                 |
| (87) EP2019052852                        | (22) 15.03.2013                        | (51) F24C 7/02                        |
| 26.09.2019                               | (54) Micromixer combustion head end    | H05B 6/76                             |
| (22) 06.02.2019                          | assembly                               | (11) EP3435739                        |
| (54) BURNER FOR A GAS TURBINE AND        | (73) General Electric Company          | (21) EP17769844.6                     |
| METHOD FOR OPERATING THE                 | (72) Westmoreland, James Harold        | (47) 07.07.2021                       |
| BURNER                                   | Melton, Patrick Benedict               | (87) JP2017008212                     |
| (73) Siemens Energy Global GmbH & Co. KG | (31) 201213423894                      | 28.09.2017                            |
| (72) GEIPEL, Philipp                     | (32) 19.03.2012                        | (22) 02.03.2017                       |
| LINDHOLM, Annika                         | (33) United States of America          | (54) HIGH FREQUENCY HEATING DEVICE    |
| MAGNUSSON, Rikard                        | (51) F23R 3/56                         | (73) Panasonic Intellectual Property  |
| MANRIQUE CARRERA, Arturo                 | F04F 13/00                             | Management Co., Ltd.                  |
| (31) 18162841                            | (11) EP3205886                         | (72) HOSOKAWA, Daisuke                |
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| (33) European Patent Office (EPO)        | (47) 14.07.2021                        | OOMORI, Yoshiharu                     |
| (51) F23R 3/00                           | (22) 19.01.2017                        | (31) 2016061028                       |
| F23R 3/06                                | (54) THERMAL AND THRUST                | (32) 25.03.2016                       |
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| (21) EP16166599.7                        | PRESSURE EXCHANGERS                    | (51) F24C 7/06                        |
| (47) 07.07.2021                          | (73) Rolls-Royce Corporation           | F24C 15/34                            |
| (22) 22.04.2016                          | (72) Masayoshi, Shimo                  | (11) EP3568643                        |
| (54) ADDITIVE MANUFACTURED               | (31) 201615041492                      | (21) EP18700195.3                     |
| COMBUSTOR HEAT SHIELD                    | (32) 11.02.2016                        | (47) 07.07.2021                       |
| (73) Raytheon Technologies Corporation   | (33) United States of America          | (87) EP2018050402                     |
| (72) CHANG, Hoyt Y.                      | (51) F24B 1/191                        | 19.07.2018                            |
| SNYDER, Brooke E.                        | F24C 15/36                             | (22) 09.01.2018                       |
| SLAVENS, Thomas N.                       | (11) EP3631304                         | (54) A COOKING OVEN, IN PARTICULAR A  |
| (31) 201514694086                        | (21) EP18733686.2                      | DOMESTIC COOKING OVEN                 |
| (32) 23.04.2015                          | (47) 07.07.2021                        | (73) Electrolux Appliances Aktiebolag |
| (33) United States of America            | (87) IB2018053896                      | (72) LUCKHARDT, Christoph             |
| (51) F23R 3/00                           | 06.12.2018                             | SCHULZ, Thomas                        |
| F23R 3/50                                | (22) 31.05.2018                        | DÄNZER, Stefan                        |
| F23R 3/60                                | (54) PROTECTIVE SCREEN FOR STOVES      | REINHARD-HERRSCHER, Fabienne          |
| (11) EP3575687                           | (73) Facci Macchine Utensili S.r.l.    | (31) 17151119                         |
| (21) EP19165959.8                        | (72) FACCI, Alessandra                 | (32) 12.01.2017                       |
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| (22) 28.03.2019                          | (32) 01.06.2017                        | (51) F24C 7/08                        |
| (54) DOME HEAT SHIELD PANEL FOR          | (33) Italy                             | F24C 15/02                            |
| A COMBUSTOR OF GAS TURBINE               | (51) F24C 1/00                         | (11) EP3450854                        |
| ENGINE                                   | F24C 7/08                              | (21) EP17188496.8                     |
| (73) Raytheon Technologies Corporation   | G01K 17/00                             | (47) 07.07.2021                       |
| (72) RILEY, Kristy Rose                  | (11) EP3529536                         | (22) 30.08.2017                       |
| BATTYE, John R.                          | (21) EP16919320.8                      | (54) COOKING OVEN WITH A REFLECTION   |
| RAMPERSAD, Joanne V.                     | (47) 14.07.2021                        | SHIELD AND A CAMERA                   |
| QUACH, San                               | (87) US2016057721                      | (73) ELECTROLUX APPLIANCES            |
| (31) 201815995508                        | 26.04.2018                             | AKTIEBOLAG                            |
| (32) 01.06.2018                          | (22) 19.10.2016                        | (72) KÄSER, Erhard                    |
| (33) United States of America            | (54) SYSTEM AND METHOD FOR FOOD        | HILDNER, Dietmar                      |
| (51) F23R 3/00                           | PREPARATION UTILIZING A MULTI-         | IVANOVIC, Branko                      |
| F23R 3/60                                | LAYER MODEL                            | (51) F24C 7/08                        |
| (11) EP3640544                           | (73) Whirlpool Corporation             | F24C 15/04                            |
| (21) EP19203398.3                        | (72) MORANDOTTI, Alberto               | (11) EP3586063                        |
| (47) 14.07.2021                          | GUATTA, Davide                         | (21) EP18705861.5                     |
| (22) 15.10.2019                          |                                        | (47) 07.07.2021                       |



|                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| (87) EP2018053269<br>30.08.2018<br>(22) 09.02.2018                                                                                                                                                                                                                                                                                                    | (31) 102016117537<br>(32) 16.09.2016<br>(33) Germany                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (72) MITSUMORI, Shinsuke<br>(51) F24F 5/00<br>F24F 1/00                                                                                                                                                                                                                                                                                                                                                                             |
| (54) COOKING APPLIANCE COMPRISING A<br>RECEIVING AREA FOR A REMOVABLE<br>SENSOR MODULE<br>(73) BSH Hausgeräte GmbH<br>(72) ERBE, Sebastian<br>HIMMEL, Arnulf<br>NEUMAYER, Dan<br>(31) 102017202778<br>(32) 21.02.2017<br>(33) Germany                                                                                                                 | (51) F24D 3/00<br>F24D 3/18<br>F24F 11/30<br>F24F 11/62<br>F24F 110/10<br>(11) EP3306204<br>(21) EP16802836.3<br>(47) 07.07.2021<br>(87) JP2016051650<br>08.12.2016<br>(22) 21.01.2016<br>(54) HOT-WATER HEATING SYSTEM,<br>CONTROL DEVICE, AND CONTROL<br>METHOD<br>(73) Mitsubishi Electric Corporation<br>(72) NAKAI, Takahiro<br>UNO, Yoshitaka<br>YAMAMOTO, Takaya<br>(31) 2015113425<br>(32) 03.06.2015<br>(33) Japan                                                                                                                                                                                                                                                         | (11) EP3370001<br>(21) EP18158280.0<br>(47) 07.07.2021<br>(22) 23.02.2018<br>(54) AIR CONDITIONING SYSTEM<br>(73) Kimura Kohki Co., Ltd.<br>(72) KIMURA, Keiichi<br>MORITA, Mitsuo<br>ISHIDA, Takayuki<br>GOTO, Kazuya<br>SATO, Hidekazu<br>(31) 2017037888<br>2017066570<br>(32) 01.03.2017<br>30.03.2017<br>(33) Japan<br>Japan                                                                                                   |
| (51) F24C 7/08<br>F24C 15/10<br>H05B 1/02<br>H05B 3/64<br>(11) EP2873925<br>(21) EP13192996.0<br>(47) 14.07.2021<br>(22) 15.11.2013<br>(54) Arrangement to supply a resistive load of<br>a household appliance and method for<br>feeding a resistive load of a household<br>appliance<br>(73) Electrolux Appliances Aktiebolag<br>(72) TCACIUC, Sorin | (51) F24D 3/18<br>F25B 13/00<br>(11) EP2413056<br>(21) EP09842231.4<br>(47) 14.07.2021<br>(87) JP2009056043<br>30.09.2010<br>(22) 26.03.2009<br>(54) AIR-CONDITIONING APPARATUS<br>(73) Mitsubishi Electric Corporation<br>(72) TAKATA, Shigeo<br>(51) F24D 19/10<br>F24H 9/20<br>G05D 23/19<br>H02J 3/14<br>G06Q 50/06<br>(11) EP3683760<br>(21) EP20155672.7<br>(47) 14.07.2021<br>(22) 23.03.2017<br>(54) METHOD FOR CONTROLLING AN<br>ENERGY SUPPLY SYSTEM<br>(73) Viessmann Climate Solutions SE<br>(72) ARNOLD, Christian<br>BOCK, Martin<br>GRAD, Andrej<br>MAURER, Tobias<br>OSTERLOH, Reinhard<br>TIMMERMANN, Jörg<br>(31) 102016205036<br>(32) 24.03.2016<br>(33) Germany | (51) F24F 5/00<br>F24F 6/02<br>F24F 11/00<br>F24F 11/80<br>F24F 11/83<br>(11) EP3631310<br>(21) EP18733945.2<br>(47) 14.07.2021<br>(87) IB2018053841<br>06.12.2018<br>(22) 30.05.2018<br>(54) DEW POINT CLIMATE GENERATOR<br>AND CORRESPONDING CLIMATE<br>CONDITIONING METHOD<br>(73) Consiglio Nazionale Delle Ricerche<br>(72) ALLEGRETTI, Ottaviano<br>DIONISI VICI, Paolo<br>(31) 201700060109<br>(32) 01.06.2017<br>(33) Italy |
| (51) F24C 15/00<br>F24C 15/02<br>F24C 15/04<br>F24C 15/20<br>F24C 15/32<br>F24C 15/34<br>(11) EP3309463<br>(21) EP16833240.1<br>(47) 14.07.2021<br>(87) KR2016008143<br>09.02.2017<br>(22) 26.07.2016<br>(54) OVEN<br>(73) Samsung Electronics Co., Ltd.<br>(72) LEE, Dong Ho<br>(31) 20150109842<br>(32) 04.08.2015<br>(33) Korea (Republic)         | (51) F24C 15/04<br>F24C 15/32<br>(11) EP3333490<br>(21) EP16202607.4<br>(47) 14.07.2021<br>(22) 07.12.2016<br>(54) COOKING OVEN WITH A DOOR<br>(73) Electrolux Appliances Aktiebolag<br>(72) CATALOGNE, Cedric<br>SPECHT, Trevor<br>SOKOVETS, Dmytro                                                                                                                                                                                                                                                                                                                                                                                                                                | (51) F24F 13/06<br>F24F 13/20<br>F24F 11/79<br>F24F 1/00<br>F24F 1/0011<br>F24F 1/0057<br>(11) EP3594582<br>(21) EP17899918.1<br>(47) 07.07.2021<br>(87) JP2017009521<br>13.09.2018<br>(22) 09.03.2017<br>(54) AIR CONDITIONER INDOOR UNIT<br>(73) Mitsubishi Electric Corporation<br>(72) SHISHIDO, Takahiro<br>SHIROTA, Mitsuhiro<br>NAMATAME, Shogo                                                                              |
| (51) F24C 15/20<br>(11) EP3513127<br>(21) EP17778192.9<br>(47) 14.07.2021<br>(87) EP2017073060<br>22.03.2018<br>(22) 13.09.2017<br>(54) EXTRACTOR DEVICE WITH AIR<br>INTAKE<br>(73) Inovvida Aero IP UG<br>(Haftungsbeschränkt)<br>(72) BERLING, Udo                                                                                                  | (51) F24F 3/06<br>F25B 31/00<br>F24F 11/49<br>F24F 11/52<br>(11) EP3382294<br>(21) EP15909299.8<br>(47) 14.07.2021<br>(87) JP2015083403<br>01.06.2017<br>(22) 27.11.2015<br>(54) AIR CONDITIONING SYSTEM<br>(73) Toshiba Carrier Corporation                                                                                                                                                                                                                                                                                                                                                                                                                                        | (51) F24H 1/10<br>(11) EP2120817<br>(21) EP08719987.3<br>(47) 14.07.2021<br>(87) IL2008000362<br>18.09.2008<br>(22) 13.03.2008<br>(54) DEVICE FOR HEATING A FLOW OF<br>LIQUID BY ELECTRICAL HEATING OF<br>A METALLIC CONDUIT<br>(73) Quality in Flow Ltd.                                                                                                                                                                           |

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|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (72) ELAZARI-VOLCANI, Ron<br>VISHNIA, David<br>SHANI, Eyal<br>KAIDAR, Avner                                                                                       | (21) EP19211089.8<br>(47) 14.07.2021<br>(22) 25.11.2019<br>(54) PROCESS AND JOINING DEVICE FOR<br>MOUNTING A SOLAR COLLECTOR                                                                                                               | (73) Robert Bosch GmbH<br>(72) Eklund, Gunnar<br>Lundborg, Jonny<br>Johansson, Markus<br>Gustafsson, Kjell<br>Akerstedt, Andreas                                                                                                                                                                                           |
| (31) 685234<br>(32) 13.03.2007<br>(33) United States of America                                                                                                   | (73) Robert Bosch GmbH<br>(72) Otting, Herbert<br>Röling, Klaus<br>Kallwellis, Volker Dietmar                                                                                                                                              | (31) 102013213885<br>102013214059<br>(32) 16.07.2013<br>17.07.2013<br>(33) Germany<br>Germany                                                                                                                                                                                                                              |
| (51) F24H 3/04<br>F24H 9/20<br>H05K 1/02                                                                                                                          | (31) 102018220249<br>(32) 26.11.2018<br>(33) Germany                                                                                                                                                                                       | (51) F25B 15/04<br>(11) EP2965024<br>(21) EP14760633.9<br>(47) 07.07.2021<br>(87) US2014017077<br>12.09.2014<br>(22) 19.02.2014<br>(54) CO-FIRED ABSORPTION SYSTEM<br>GENERATOR                                                                                                                                            |
| (11) EP2979523<br>(21) EP14714204.6<br>(47) 14.07.2021<br>(87) EP2014055700<br>02.10.2014<br>(22) 21.03.2014<br>(54) CONTROL MODULE FOR AN<br>ELECTRIC APPLIANCE  | (51) F24S 25/13<br>F24S 25/61<br>F24S 25/65<br>(11) EP3450876<br>(21) EP18192379.8<br>(47) 07.07.2021<br>(22) 04.09.2018<br>(54) SUPPORT STRUCTURE FOR<br>INSTALLING SOLAR COLLECTOR<br>PANELS, COMPRISING A QUICK<br>FASTENING DEVICE     | (73) ROCKY RESEARCH<br>(72) ROCKENFELLER, Uwe<br>SARKISIAN, Paul<br>(31) 201313784624<br>(32) 04.03.2013<br>(33) United States of America                                                                                                                                                                                  |
| (73) Valeo Systemes Thermiques<br>(72) PUZENAT, Bertrand<br>ELBHAR, Thierry<br>AUDOYE, Jean-Baptiste<br>RENARD, Alain                                             | (31) 1352738<br>(32) 26.03.2013<br>(33) France                                                                                                                                                                                             | (51) F25B 21/00<br>(11) EP3074701<br>(21) EP14830546.9<br>(47) 14.07.2021<br>(87) IB2014002621<br>04.06.2015<br>(22) 01.12.2014<br>(54) MAGNETOCALORIC HEAT<br>APPARATUS                                                                                                                                                   |
| (31) 1352738<br>(32) 26.03.2013<br>(33) France                                                                                                                    | (51) F24H 3/06<br>F26B 21/00<br>(11) EP3580511<br>(21) EP18709254.9<br>(47) 14.07.2021<br>(87) DE2018200005<br>16.08.2018<br>(22) 31.01.2018<br>(54) AIR HEATER FOR A DRYING TOWER<br>AND DRYING TOWER FOR DRYING A<br>PRODUCT TO BE DRIED | (73) UBIBLUE<br>(72) MULLER, Christian<br>BRUMPTER, Guillaume<br>(31) 1361816<br>(32) 29.11.2013<br>(33) France                                                                                                                                                                                                            |
| (73) Lübbes Anlagen- und Umwelttechnik<br>GmbH<br>(72) LÜBBES, Matthias<br>(31) 202017100733 U<br>(32) 10.02.2017<br>(33) Germany                                 | (73) Cardona Dominguez, Sergio<br>(72) Cardona Dominguez, Sergio<br>(31) 201731024 U<br>(32) 05.09.2017<br>(33) Spain                                                                                                                      | (51) F25B 21/02<br>F25D 17/06<br>F25D 23/00<br>F25D 23/10<br>(11) EP3611452<br>(21) EP19189557.2<br>(47) 14.07.2021<br>(22) 01.08.2019<br>(54) REFRIGERATOR<br>(73) LG ELECTRONICS INC.<br>(72) KIM, Yongnam<br>OH, Minkyu<br>NO, Yanghwan<br>AN, Seongwoo<br>(31) 20180095588<br>(32) 16.08.2018<br>(33) Korea (Republic) |
| (51) F24H 4/02<br>F25B 1/00<br>F25B 5/02<br>F25B 6/02<br>F25B 13/00<br>F25B 27/00<br>F24F 11/30                                                                   | (51) F24T 10/10<br>(11) EP3587956<br>(21) EP19182640.3<br>(47) 14.07.2021<br>(22) 26.06.2019<br>(54) ARRANGEMENT OF EARTH<br>COLLECTORS FOR LARGE-SCALE<br>PLANTS IN COLD LOCAL HEAT USAGE                                                 | (51) F25B 1/00<br>F25B 39/02<br>F28F 13/12<br>(11) EP3524917<br>(21) EP16918274.8<br>(47) 14.07.2021<br>(87) JP2016079514<br>12.04.2018<br>(22) 04.10.2016<br>(54) REFRIGERATION CYCLE DEVICE                                                                                                                              |
| (11) EP3483518<br>(21) EP17837036.7<br>(47) 07.07.2021<br>(87) JP2017028134<br>08.02.2018<br>(22) 02.08.2017<br>(54) HEAT SOURCE UNIT FOR<br>REFRIGERATION DEVICE | (73) Mitsubishi Electric Corporation<br>(72) HIGASHIUE, Shinya<br>ISHIBASHI, Akira<br>MAEDA, Tsuyoshi<br>ITO, Daisuke<br>NAKAMURA, Shin<br>AKAIWA, Ryota<br>YATSUYANAGI, Akira<br>KOMIYA, Yuta                                             | (73) KIM, Yongnam<br>OH, Minkyu<br>NO, Yanghwan<br>AN, Seongwoo<br>(31) 20180095588<br>(32) 16.08.2018<br>(33) Korea (Republic)                                                                                                                                                                                            |
| (73) Daikin Industries, Ltd.<br>(72) UEDA Hiroki<br>OKUBO Eisaku<br>(31) 2016153006<br>(32) 03.08.2016<br>(33) Japan                                              | (51) F25B 13/00<br>F25B 30/02<br>F25B 49/02<br>(11) EP2827081<br>(21) EP14170062.5<br>(47) 07.07.2021<br>(22) 27.05.2014<br>(54) Method for controlling a heat pump                                                                        | (51) F25B 25/00<br>F25D 11/02<br>F25D 21/12<br>(11) EP3230664<br>(21) EP15801445.6<br>(47) 07.07.2021<br>(87) EP2015077963<br>16.06.2016<br>(22) 27.11.2015                                                                                                                                                                |
| (51) F24S 10/75<br>F24S 25/20<br>F24S 80/40<br>(11) EP3657093                                                                                                     |                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                            |

|                                      |                                    |                                        |
|--------------------------------------|------------------------------------|----------------------------------------|
| (54) NO-FROST REFRIGERATOR           | (32) 10.11.2017                    | China                                  |
| (73) BSH Hausgeräte GmbH             | (33) Korea (Republic)              | China                                  |
| (72) LIENGAARD, Niels                | (51) F25C 1/10                     | China                                  |
| MRZYGLOD, Matthias                   | F25C 5/08                          | United States of America               |
| (31) 102014225102                    | F25D 23/12                         | (51) F25D 11/00                        |
| (32) 08.12.2014                      | F25D 31/00                         | F25D 17/06                             |
| (33) Germany                         | F25C 1/24                          | F25D 17/08                             |
| (51) F25B 30/02                      | (11) EP3581862                     | F25D 21/08                             |
| F28D 7/02                            | (21) EP17896163.7                  | F25D 23/06                             |
| (11) EP3660435                       | (47) 07.07.2021                    | (11) EP3271669                         |
| (21) EP17919080.6                    | (87) CN2017085753                  | (21) EP16842200.4                      |
| (47) 14.07.2021                      | 16.08.2018                         | (47) 14.07.2021                        |
| (87) JP2017026674                    | (22) 24.05.2017                    | (87) KR2016009481                      |
| 31.01.2019                           | (54) ICE MAKER AND A REFRIGERATOR  | 09.03.2017                             |
| (22) 24.07.2017                      | COMPRISING IT                      | (22) 26.08.2016                        |
| (54) HEAT EXCHANGER AND              | (73) Hefei Hualing Co., Ltd.       | (54) REFRIGERATOR                      |
| REFRIGERATION CYCLE DEVICE           | Hefei Midea Refrigerator Co., Ltd. | (73) Samsung Electronics Co., Ltd.     |
| (73) Mitsubishi Electric Corporation | (72) SHAO, Yang                    | (72) BAE, Jung Wook                    |
| (72) MURATA, Kenta                   | SI, Zengqiang                      | SEO, Kook Jeong                        |
| KOIDE, Toru                          | LV, Zhengguang                     | JEONG, Young Don                       |
| YANACHI, Satoru                      | WANG, Jincui                       | (31) 20150121602                       |
| MIYAKAWA, Kodai                      | YANG, Guangqing                    | 20150183473                            |
| (51) F25B 39/04                      | (31) 201710076843                  | (32) 28.08.2015                        |
| (11) EP3114417                       | (32) 13.02.2017                    | 22.12.2015                             |
| (21) EP15715410.5                    | (33) China                         | (33) Korea (Republic)                  |
| (47) 14.07.2021                      | (51) F25C 5/04                     | Korea (Republic)                       |
| (87) IB2015051391                    | F25C 5/18                          | (51) F25D 17/02                        |
| 03.09.2015                           | (11) EP3147597                     | (11) EP3076109                         |
| (22) 25.02.2015                      | (21) EP15880803.0                  | (21) EP16155249.2                      |
| (54) HORIZONTAL CONDENSER WITH       | (47) 07.07.2021                    | (47) 07.07.2021                        |
| COOLANT ACCUMULATOR                  | (87) CN2015075515                  | (22) 11.02.2016                        |
| (73) Denso Thermal Systems Spa       | 11.08.2016                         | (54) COOLING SYSTEM AND METHOD FOR     |
| (72) NAPOLI, Pasquale                | (22) 31.03.2015                    | OPERATING THE COOLING SYSTEM           |
| PEROCCHIO, Davide                    | (54) ICE STORAGE DEVICE AND        | (73) Viessmann Refrigeration Solutions |
| TOSCANO RIVALTA, Giovanni            | REFRIGERATOR                       | GmbH                                   |
| DI TONNO, Massimo                    | (73) Hisense Ronshen (Guangdong)   | (72) Brockmann, Robert                 |
| (31) TO20140157                      | Refrigerator Co., Ltd.             | Vaupel, Manfred                        |
| (32) 26.02.2014                      | (72) GUO, Gang                     | Bühning, Andreas                       |
| (33) Italy                           | WANG, Meiyang                      | (31) 102015104901                      |
| (51) F25B 39/04                      | LONG, Xiaofen                      | 102015119362                           |
| F25B 47/00                           | ZENG, Wen                          | (32) 30.03.2015                        |
| F25C 5/18                            | LIAO, Qiang                        | 10.11.2015                             |
| (11) EP3292356                       | YOU, Feiyue                        | (33) Germany                           |
| (21) EP16789924.4                    | (31) 201510056903                  | Germany                                |
| (47) 07.07.2021                      | (32) 03.02.2015                    | (51) F25D 17/06                        |
| (87) US2016030525                    | (33) China                         | (11) EP3193109                         |
| 10.11.2016                           | (51) F25D 11/00                    | (21) EP17151208.0                      |
| (22) 03.05.2016                      | (11) EP3643996                     | (47) 07.07.2021                        |
| (54) ICE MAKER WITH REVERSING        | (21) EP19204800.7                  | (22) 12.01.2017                        |
| CONDENSER FAN MOTOR TO               | (47) 07.07.2021                    | (54) REFRIGERATOR                      |
| MAINTAIN CLEAN CONDENSER             | (22) 23.10.2019                    | (73) LG ELECTRONICS INC.               |
| (73) True Manufacturing Co., Inc.    | (54) PORTABLE REFRIGERATOR         | (72) JUNG, Yongrak                     |
| (72) BROADBENT, John Allen           | (73) Acosolar Inc.                 | (31) 20160004340                       |
| FRIEND, John                         | Nanjing Hongyuan Renewable Energy  | (32) 13.01.2016                        |
| (31) 201562157582 P                  | Technology Co., Ltd.               | (33) Korea (Republic)                  |
| (32) 06.05.2015                      | (72) TANG, Longhua                 | (51) F25D 17/06                        |
| (33) United States of America        | ZHANG, Zhizhong                    | F25D 23/06                             |
| (51) F25C 1/04                       | (31) 201821740385 U                | (11) EP3557164                         |
| F25C 1/24                            | 201821950528 U                     | (21) EP18192842.5                      |
| F25C 5/20                            | 201822171825 U                     | (47) 07.07.2021                        |
| (11) EP3483533                       | 201920766615 U                     | (22) 06.09.2018                        |
| (21) EP18204796.9                    | 201916447623                       | (54) REFRIGERATOR                      |
| (47) 14.07.2021                      | (32) 26.10.2018                    | (73) LG ELECTRONICS INC.               |
| (22) 07.11.2018                      | 26.11.2018                         | (72) KIM, Donghwi                      |
| (54) REFRIGERATOR                    | 24.12.2018                         | KANG, Sunghye                          |
| (73) LG Electronics Inc.             | 27.05.2019                         | SONG, Minho                            |
| (72) KIM, Yonghyun                   | 20.06.2019                         | CHO, Yongbum                           |
| (31) 20170149939                     | (33) China                         | (31) 20180046204                       |

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|--------------------------------------------------------------------|------------------------------------|----------------------------------------------------|
| (32) 20.04.2018                                                    | (32) 06.08.2014                    | (54) A COOLING DEVICE                              |
| (33) Korea (Republic)                                              | (33) China                         | (73) Arçelik Anonim Sirketi                        |
| (51) F25D 19/00                                                    | (51) F25D 23/00                    | (72) OZKAN, Ozgur                                  |
| (11) EP2525175                                                     | (11) EP3289298                     | (73) COSAN, Ahmet Ferit                            |
| (21) EP12167710.8                                                  | (21) EP16719397.8                  | (31) 201706864                                     |
| (47) 14.07.2021                                                    | (47) 07.07.2021                    | (32) 10.05.2017                                    |
| (22) 11.05.2012                                                    | (87) EP2016059514                  | (33) Turkey                                        |
| (54) Cooling system integration enabling platform architecture     | 03.11.2016                         | (51) F25D 23/02                                    |
| (73) WHIRLPOOL CORPORATION                                         | (22) 28.04.2016                    | F25D 23/04                                         |
| (72) Cur, Nihat O.                                                 | (54) HOME APPLIANCE                | F25D 25/02                                         |
| Gomes, Alberto R.                                                  | (73) BSH Hausgeräte GmbH           | (11) EP2572149                                     |
| Lopes, Luiz Antonio D.                                             | (72) CIYANOGLU, Mehmet             | (21) EP11772262.9                                  |
| Wu, Guolian                                                        | GÜNTAV, Emre                       | (47) 14.07.2021                                    |
| Da Silva, Luciana Wasnievski                                       | SAHIN, Aydin                       | (87) KR2011002905                                  |
| (31) 201113108226                                                  | YILDIZGÖÇER, Tanzer                | 27.10.2011                                         |
| 201113108293                                                       | ERTIK, Mustafa                     | (22) 21.04.2011                                    |
| 201113108183                                                       | KEMPFLE, Stephan                   | (54) REFRIGERATOR                                  |
| (32) 16.05.2011                                                    | SÖGÜT, Murat                       | (73) LG Electronics Inc.                           |
| 16.05.2011                                                         | (31) 201505248                     | (72) HWANG, Jung Yeon                              |
| 16.05.2011                                                         | 201605313                          | KANG, Jin Won                                      |
| (33) United States of America                                      | (32) 29.04.2015                    | YOU, Myung Dong                                    |
| United States of America                                           | 25.04.2016                         | SEO, Woon Kyu                                      |
| United States of America                                           | (33) Turkey                        | JUNG, Han Jin                                      |
| (51) F25D 19/00                                                    | Turkey                             | LEE, Eunjoo                                        |
| (11) EP3435009                                                     | (51) F25D 23/02                    | LEE, Hangbok                                       |
| (21) EP17275119.0                                                  | (11) EP3232144                     | (31) 20110032225                                   |
| (47) 14.07.2021                                                    | (21) EP16847607.5                  | 20100040647                                        |
| (22) 28.07.2017                                                    | (47) 07.07.2021                    | 20100036722                                        |
| (54) CRYOSTAT ARRANGEMENTS AND MOUNTING ARRANGEMENTS FOR CRYOSTATS | (87) KR2016012931                  | (32) 07.04.2011                                    |
| (73) Tesla Engineering Limited                                     | 13.07.2017                         | 30.04.2010                                         |
| (72) Leigh, Benjamin David                                         | (22) 10.11.2016                    | 21.04.2010                                         |
| Levantine, Oliver Matthew                                          | (54) REFRIGERATOR                  | (33) Korea (Republic)                              |
| (31) 201711970                                                     | (73) LG Electronics Inc.           | Korea (Republic)                                   |
| (32) 25.07.2017                                                    | (72) YI, Myeongha                  | Korea (Republic)                                   |
| (33) United Kingdom                                                | (31) 20160001281                   | (51) F25D 23/04                                    |
| (51) F25D 21/02                                                    | (32) 05.01.2016                    | F25D 25/02                                         |
| F25D 31/00                                                         | (33) Korea (Republic)              | (11) EP3550236                                     |
| (11) EP3610209                                                     | (51) F25D 23/02                    | (21) EP19159210.4                                  |
| (21) EP18717916.3                                                  | F25C 1/04                          | (47) 14.07.2021                                    |
| (47) 14.07.2021                                                    | F25C 5/187                         | (22) 25.02.2019                                    |
| (87) EP2018059453                                                  | F25C 5/20                          | (54) A STORAGE BIN ASSEMBLY FOR A REFRIGERATOR     |
| 18.10.2018                                                         | (11) EP3667205                     | (73) Whirlpool Corporation                         |
| (22) 12.04.2018                                                    | (21) EP18860380.7                  | (72) Matusiak, Szymon                              |
| (54) A COOLING BATH FOR COOLING A LIQUID                           | (47) 07.07.2021                    | Krawczyk, Krzysztof                                |
| (73) WLI Trading Limited                                           | (87) KR2018011600                  | Arresta, Giuseppina                                |
| (72) BEN-DAVID, Jonathan                                           | 04.04.2019                         | Valle, Maurizio                                    |
| KIM, Heung Soon                                                    | (22) 28.09.2018                    | Nortey, Christine                                  |
| (31) 201705881                                                     | (54) REFRIGERATOR                  | (31) 201815945315                                  |
| (32) 12.04.2017                                                    | (73) Samsung Electronics Co., Ltd. | (32) 04.04.2018                                    |
| (33) United Kingdom                                                | (72) JEONG, Jin                    | (33) United States of America                      |
| (51) F25D 21/04                                                    | YOON, Seok Jun                     | (51) F25D 23/06                                    |
| F25D 23/02                                                         | JANG, Do Yun                       | (11) EP2304356                                     |
| (11) EP2982917                                                     | CHO, Yeon Woo                      | (21) EP09757487.5                                  |
| (21) EP15179536.6                                                  | SEO, Kook Jeong                    | (47) 07.07.2021                                    |
| (47) 07.07.2021                                                    | (31) 20170127967                   | (87) EP2009056648                                  |
| (22) 03.08.2015                                                    | 20180066893                        | 10.12.2009                                         |
| (54) REFRIGERATION APPLIANCE HAVING EMBEDDED HANDLE                | (32) 29.09.2017                    | (22) 29.05.2009                                    |
| (73) BSH Hausgeräte GmbH                                           | 11.06.2018                         | (54) DOMESTIC APPLIANCE IN PARTICULAR REFRIGERATOR |
| (72) Ding, Yuan                                                    | (33) Korea (Republic)              | (73) BSH Hausgeräte GmbH                           |
| Ren, Xiaoguang                                                     | Korea (Republic)                   | (72) SCHILK, Andreas                               |
| Song, Jicong                                                       | (51) F25D 23/02                    | STELZER, Jörg                                      |
| Zhao, Changliang                                                   | F25D 23/04                         | (31) 102008026529                                  |
| (31) 201410385547                                                  | (11) EP3622232                     | (32) 03.06.2008                                    |
|                                                                    | (21) EP18720613.1                  | (33) Germany                                       |
|                                                                    | (47) 14.07.2021                    | (51) F25D 23/06                                    |
|                                                                    | (87) EP2018060940                  | F25D 25/02                                         |
|                                                                    | 15.11.2018                         |                                                    |
|                                                                    | (22) 27.04.2018                    |                                                    |

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| (21) EP19193835.6                  | 02.06.2016                                | (51) F28D 21/00                                |
| (47) 07.07.2021                    | (22) 19.11.2015                           | F28F 9/02                                      |
| (22) 27.08.2019                    | (54) SMEAR SAMPLE PREPARATION             | (11) EP2865983                                 |
| (54) REFRIGERATOR                  | DEVICE                                    | (21) EP13780882.0                              |
| (73) LG ELECTRONICS INC.           | (73) Sysmex Corporation                   | (47) 14.07.2021                                |
| (72) Oh, Changseok                 | (72) KUBOTA, Shogo                        | (87) JP2013061858                              |
| (31) 20180102319                   | SHINABE, Seiya                            | 31.10.2013                                     |
| (32) 29.08.2018                    | KONDO, Kenji                              | (22) 23.04.2013                                |
| (33) Korea (Republic)              | (31) 2014239038                           | (54) HEAT-EXCHANGER HEADER AND                 |
| (51) F25D 25/02                    | (32) 26.11.2014                           | HEAT EXCHANGER PROVIDED                        |
| (11) EP3315886                     | (33) Japan                                | THEREWITH                                      |
| (21) EP17199179.7                  | (51) F26B 21/02                           | (73) Mitsubishi Electric Corporation           |
| (47) 14.07.2021                    | (11) EP3387354                            | (72) ISHIBASHI, Akira                          |
| (22) 30.10.2017                    | (21) EP16784891.0                         | MATSUDA, Takuya                                |
| (54) STORAGE CONTAINER AND         | (47) 07.07.2021                           | LEE, Sangmu                                    |
| REFRIGERATOR HAVING THE SAME       | (87) EP2016075206                         | OKAZAKI, Takashi                               |
| (73) Samsung Electronics Co., Ltd. | 15.06.2017                                | (31) PCT/JP2012/002879                         |
| (72) Lee, Jae Bok                  | (22) 20.10.2016                           | (32) 26.04.2012                                |
| Jang, Myoung Jin                   | (54) TREATMENT PLANT AND PROCESS          | (33) World Intellectual Property Office (WIPO) |
| Ryu, Sang Chul                     | FOR TREATING WORKPIECES                   | (51) F28F 3/02                                 |
| Park, Kyoung-Sun                   | (73) Dürr Systems AG                      | F28F 3/06                                      |
| Jung, Sang Gyu                     | (72) IGLAUER, Oliver                      | F28F 3/12                                      |
| Hwang, In-Sung                     | WOLL, Kevin                               | H01L 23/367                                    |
| (31) 20160143515                   | WIELAND, Dietmar                          | H01L 23/467                                    |
| (32) 31.10.2016                    | (31) 102015224916                         | H05K 7/20                                      |
| (33) Korea (Republic)              | (32) 10.12.2015                           | (11) EP3564992                                 |
| (51) F25J 1/00                     | (33) Germany                              | (21) EP18170404.0                              |
| F25J 1/02                          | (51) F28D 7/00                            | (47) 07.07.2021                                |
| (11) EP1698844                     | F28D 7/16                                 | (22) 02.05.2018                                |
| (21) EP04799702.8                  | F28D 9/00                                 | (54) FLUID-BASED COOLING DEVICE FOR            |
| (47) 14.07.2021                    | (11) EP3650794                            | COOLING AT LEAST TWO DISTINCT                  |
| (87) JP2004016921                  | (21) EP18204873.6                         | FIRST HEAT-GENERATING ELEMENTS                 |
| 02.06.2005                         | (47) 14.07.2021                           | OF A HEAT SOURCE ASSEMBLY                      |
| (22) 09.11.2004                    | (22) 07.11.2018                           | (73) EKWB d.o.o.                               |
| (54) GAS LIQUEFYING PLANT          | (54) A SHELL HEAT EXCHANGER AND USE       | (72) KÖNIG, Edvard                             |
| (73) JGC Corporation               | OF A SHELL HEAT EXCHANGER                 | HARPER, Daniel George                          |
| (72) IJIMA, Takayuki               | (73) Johnson Controls Denmark ApS         | (51) F28F 9/18                                 |
| FUKUOKA, Shinichi                  | (72) STUBKIER, Simon                      | F28F 21/08                                     |
| TAKEZAWA, Naoyuki                  | SKOV, Per                                 | B23K 26/20                                     |
| (31) 2003387748                    | BUNDE-PEDERSEN, Christian Per             | (11) EP3405738                                 |
| (32) 18.11.2003                    | DREMARK-LARSEN, Morten                    | (21) EP17701792.8                              |
| (33) Japan                         | (51) F28D 15/02                           | (47) 07.07.2021                                |
| (51) F25J 1/00                     | F28D 15/04                                | (87) EP2017025012                              |
| F25J 1/02                          | (11) EP3524912                            | 27.07.2017                                     |
| (11) EP3561421                     | (21) EP19154977.3                         | (22) 18.01.2017                                |
| (21) EP19171429.4                  | (47) 07.07.2021                           | (54) METHOD OF CONNECTING TUBES OF             |
| (47) 07.07.2021                    | (22) 01.02.2019                           | A TUBE BUNDLE HEAT-EXCHANGER                   |
| (22) 26.04.2019                    | (54) LOOP HEAT PIPE                       | WITH A TUBE BASE OF THE TUBE                   |
| (54) IMPROVED METHOD AND SYSTEM    | (73) Shinko Electric Industries Co., Ltd. | BUNDLE HEAT-EXCHANGER                          |
| FOR COOLING A HYDROCARBON          | (72) MACHIDA, Yoshihiro                   | (73) Linde GmbH                                |
| STREAM USING A GAS PHASE           | (31) 2018019487                           | (72) SEEHOLZER, Christoph                      |
| REFRIGERANT                        | (32) 06.02.2018                           | WIMMER, Georg                                  |
| (73) AIR PRODUCTS AND CHEMICALS,   | (33) Japan                                | (31) 16000127                                  |
| INC.                               | (51) F28D 20/00                           | (32) 19.01.2016                                |
| (72) KRISHNAMURTHY, Gowri          | (11) EP3695183                            | (33) European Patent Office (EPO)              |
| ROBERTS, Mark Julian               | (21) EP18810897.1                         | (51) F28F 13/06                                |
| (31) 201815964377                  | (47) 14.07.2021                           | F24S 10/95                                     |
| (32) 27.04.2018                    | (87) EP2018081142                         | (11) EP3341659                                 |
| (33) United States of America      | 23.05.2019                                | (21) EP16753423.9                              |
| (51) F26B 3/04                     | (22) 14.11.2018                           | (47) 07.07.2021                                |
| F26B 9/00                          | (54) ASSEMBLY FOR STORING THERMAL         | (87) GB2016052487                              |
| F26B 25/06                         | ENERGY                                    | 02.03.2017                                     |
| G01N 1/31                          | (73) Siemens Gamesa Renewable Energy      | (22) 10.08.2016                                |
| G01N 33/48                         | GmbH & Co. KG                             | (54) ATTACHMENT DEVICE FOR A                   |
| (11) EP3225970                     | (72) INHETVEEN, Patrick                   | HEATING APPARATUS                              |
| (21) EP15862485.8                  | (31) 17202011                             | (73) Soltropy Limited                          |
| (47) 07.07.2021                    | (32) 16.11.2017                           | (72) SPEAKE, Stuart                            |

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| (31) 201515226                    | (22) 11.05.2017                           | ITO Jo                            |
| (32) 27.08.2015                   | (54) THREE-DIMENSIONAL CALIBRATION        | (31) 2013169479                   |
| (33) United Kingdom               | DEVICE AND METHOD                         | (32) 19.08.2013                   |
| (51) F41A 17/08                   | (73) Illinois Tool Works, Inc.            | (33) Japan                        |
| F41H 11/02                        | (72) ALLEN, Roy                           | (51) G01B 9/02                    |
| (11) EP3458793                    | MCMAHON, Stephen, M.                      | G01J 3/06                         |
| (21) EP17799764.0                 | (31) 201662340766 P                       | G01J 3/453                        |
| (47) 07.07.2021                   | (32) 24.05.2016                           | (11) EP3390991                    |
| (87) SE2017050442                 | (33) United States of America             | (21) EP16719673.2                 |
| 23.11.2017                        | (51) G01B 5/00                            | (47) 07.07.2021                   |
| (22) 05.05.2017                   | G01M 3/28                                 | (87) US2016028144                 |
| (54) DEVICE AND METHOD FOR FIRING | (11) EP3586099                            | 22.06.2017                        |
| DIRECTION LIMITATION AND A        | (21) EP18701702.5                         | (22) 18.04.2016                   |
| COUNTERMEASURE ARRANGEMENT        | (47) 14.07.2021                           | (54) SELF CALIBRATION FOR MIRROR  |
| (73) Saab AB                      | (87) EP2018051257                         | POSITIONING IN OPTICAL MEMS       |
| (72) ZÄTTERQVIST, Christer        | 30.08.2018                                | INTERFEROMETERS                   |
| (31) 1650665                      | (22) 19.01.2018                           | (73) SI-Ware Systems              |
| 1651465                           | (54) TESTBENCH AND MEASURING              | (72) ANWAR, Momen                 |
| (32) 17.05.2016                   | PROCEDURE                                 | MEDHAT, Mostafa                   |
| 08.11.2016                        | (73) Bayerische Motoren Werke             | MORTADA, Bassem                   |
| (33) Sweden                       | Aktiengesellschaft                        | EL SHATER, Ahmed, Othman          |
| Sweden                            | (72) ROSSBERG, Dirk                       | GAD SEIF, Mina                    |
| (51) F41A 33/02                   | WIEDEMANN, Stefan                         | NAGY, Muhammed                    |
| F41J 5/02                         | (31) 102017203110                         | SAADANY, Bassam, A.               |
| (11) EP3542120                    | (32) 27.02.2017                           | HAFEZ, Amr, N.                    |
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| (47) 14.07.2021                   | (51) G01B 7/16                            | 201615130876                      |
| (87) IB2017056985                 | G01G 3/14                                 | (32) 18.12.2015                   |
| 24.05.2018                        | G01L 1/22                                 | 15.04.2016                        |
| (22) 08.11.2017                   | (11) EP3205990                            | (33) United States of America     |
| (54) A DETECTOR ASSEMBLY OF       | (21) EP15849366.8                         | United States of America          |
| ELECTROMAGNETIC BEAMS             | (47) 07.07.2021                           | (51) G01B 9/02                    |
| (73) LACS S.r.l.                  | (87) CN2015091554                         | G01S 7/48                         |
| (72) MIAN, Sergio                 | 14.04.2016                                | G01S 17/88                        |
| LEPRE, Alessio                    | (22) 09.10.2015                           | H01S 3/11                         |
| (31) 201600116788                 | (54) WEIGHING SENSOR, WEIGHING            | H01S 3/13                         |
| (32) 18.11.2016                   | NETWORK AND MONITORING                    | G01S 7/4865                       |
| (33) Italy                        | METHOD                                    | G01S 17/10                        |
| (51) F41J 5/06                    | (73) Mettler Toledo (Changzhou) Precision | (11) EP3521854                    |
| G01B 7/06                         | Instrument Ltd.                           | (21) EP18154647.4                 |
| G01B 11/06                        | Mettler Toledo (Changzhou)                | (47) 14.07.2021                   |
| G01N 9/00                         | Measurement Technology Ltd.               | (22) 01.02.2018                   |
| G01P 15/06                        | Mettler Toledo (Changzhou)                | (54) FREQUENCY DOMAIN DISTANCE    |
| G01P 15/08                        | Scale&System Ltd.                         | MEASUREMENT CROSS                 |
| (11) EP3304095                    | (72) ZHANG, Ying                          | CORRELATION                       |
| (21) EP16729153.3                 | WU, Jianwei                               | (73) OHB System AG                |
| (47) 14.07.2021                   | WANG, Wei                                 | (72) Eder, Bastian                |
| (87) US2016034902                 | WEN, Fenglian                             | Hutterer, Martin                  |
| 08.12.2016                        | LIN, Zhitie                               | (51) G01B 9/02                    |
| (22) 28.05.2016                   | (31) 201410529715                         | G02B 21/00                        |
| (54) HYPER-VELOCITY IMPACT SENSOR | (32) 09.10.2014                           | G02B 21/24                        |
| (73) Raytheon Company             | (33) China                                | G02B 21/33                        |
| (72) WRIGHT, Richard J.           | (51) G01B 9/02                            | (11) EP3714309                    |
| SIERCHIO, James G.                | G01J 3/02                                 | (21) EP19700684.4                 |
| OWENS, William R.                 | G01J 3/453                                | (47) 07.07.2021                   |
| CRAWFORD, Thomas M.               | (11) EP3037792                            | (87) EP2019050669                 |
| CALKINS, Myron E.                 | (21) EP14837699.9                         | 18.07.2019                        |
| (31) 201514730746                 | (47) 14.07.2021                           | (22) 11.01.2019                   |
| (32) 04.06.2015                   | (87) JP2014070219                         | (54) DYNAMIC FOCUSING SYSTEM FOR  |
| (33) United States of America     | 26.02.2015                                | AN OPTICAL DEVICE                 |
| (51) G01B 3/30                    | (22) 31.07.2014                           | (73) Damae Medical                |
| G01B 21/04                        | (54) METHOD FOR MANUFACTURING AN          | (72) LEVECQ, Olivier              |
| G06T 7/80                         | OPTICAL INTERFEROMETER                    | SIRET, David                      |
| (11) EP3465083                    | (73) Hamamatsu Photonics K.K.             | (31) 18305025                     |
| (21) EP17728694.5                 | (72) SUZUKI Tomofumi                      | (32) 12.01.2018                   |
| (47) 07.07.2021                   | WARASHINA Yoshihisa                       | (33) European Patent Office (EPO) |
| (87) US2017032100                 | KASAMORI Kohei                            | (51) G01B 11/00                   |
| 30.11.2017                        | SUGIMOTO Tatsuya                          | (11) EP3184957                    |

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| (21) EP15202538.3                   | (54) PHOTO THERMAL MEASURING                   | (33) Germany                          |
| (47) 14.07.2021                     | DEVICE AND METHOD FOR PHOTO                    | (51) G01C 11/02                       |
| (22) 23.12.2015                     | THERMAL MEASURING                              | H04N 5/232                            |
| (54) MODULAR MICRO OPTICS FOR       | (73) OptiSense GmbH & Co. KG                   | H04N 5/247                            |
| OPTICAL PROBES                      | (72) Schriever, Clemens                        | G03B 15/00                            |
| (73) Hexagon Technology Center GmbH | Nelke, Georg                                   | G03B 37/04                            |
| (72) PADUCH, Alexandre              | (51) G01B 11/06                                | (11) EP2504735                        |
| JENSEN, Thomas                      | G01N 21/84                                     | (21) EP10833829.4                     |
| (51) G01B 11/00                     | G01N 21/896                                    | (47) 07.07.2021                       |
| G01D 5/347                          | (11) EP2910934                                 | (87) US2010057692                     |
| G01D 5/38                           | (21) EP15151641.6                              | 03.06.2011                            |
| (11) EP3443304                      | (47) 07.07.2021                                | (22) 23.11.2010                       |
| (21) EP17713943.3                   | (22) 19.01.2015                                | (54) MULTI-RESOLUTION DIGITAL LARGE   |
| (47) 14.07.2021                     | (54) Device for inspecting a material provided | FORMAT CAMERA WITH MULTIPLE           |
| (87) EP2017057255                   | with a coated surface and corresponding        | DETECTOR ARRAYS                       |
| 19.10.2017                          | method                                         | (73) Vexcel Imaging US, Inc.          |
| (22) 28.03.2017                     | (73) Isra Surface Vision GmbH                  | (72) GRUBER, Michael                  |
| (54) POSITION MEASURING DEVICE      | (72) Kubiak, Rolf                              | PONTICELLI, Martin, Josef             |
| AND METHOD FOR OPERATING A          | (31) 102014100594                              | SCHICKLER, Wolfgang                   |
| POSITION MEASURING DEVICE           | (32) 20.01.2014                                | (31) 624412                           |
| (73) Dr. Johannes Heidenhain GmbH   | (33) Germany                                   | (32) 24.11.2009                       |
| (72) MUSCH, Bernhard                | (51) G01B 11/245                               | (33) United States of America         |
| KÄLBERER, Thomas                    | G01B 11/25                                     | (51) G01C 15/00                       |
| HUBER, Thomas                       | (11) EP2813808                                 | (11) EP3376161                        |
| (31) 102016206144                   | (21) EP14001505.8                              | (21) EP18163131.8                     |
| (32) 13.04.2016                     | (47) 07.07.2021                                | (47) 07.07.2021                       |
| (33) Germany                        | (22) 28.04.2014                                | (22) 05.12.2013                       |
| (51) G01B 11/00                     | (54) Three-dimensional optical shape           | (54) OPERATING A TOTAL STATION WITH A |
| G01D 5/38                           | measuring apparatus                            | STAIR-LIKE SCANNING PROFILE           |
| G03F 7/20                           | (73) Yamaha Hatsudoki Kabushiki Kaisha         | (73) Trimble AB                       |
| G03F 9/00                           | (72) Tabata, Nobuaki                           | (72) BERG, Ulf                        |
| (11) EP3239776                      | (31) 2013124349                                | (51) G01C 17/34                       |
| (21) EP15873079.6                   | (32) 13.06.2013                                | G01C 21/02                            |
| (47) 07.07.2021                     | (33) Japan                                     | G01J 4/00                             |
| (87) JP2015085848                   | (51) G01B 11/25                                | G01J 4/04                             |
| 30.06.2016                          | G06T 7/586                                     | (11) EP2480869                        |
| (22) 22.12.2015                     | (11) EP3392831                                 | (21) EP10818498.7                     |
| (54) MEASUREMENT DEVICE AND         | (21) EP17850048.4                              | (47) 14.07.2021                       |
| MEASUREMENT METHOD,                 | (47) 14.07.2021                                | (87) IL2010000780                     |
| EXPOSURE DEVICE AND EXPOSURE        | (87) CN2017086258                              | 31.03.2011                            |
| METHOD, AND DEVICE PRODUCTION       | 22.03.2018                                     | (22) 21.09.2010                       |
| METHOD                              | (22) 27.05.2017                                | (54) APPARATUS AND METHOD FOR         |
| (73) Nikon Corporation              | (54) THREE-DIMENSIONAL SENSOR                  | NAVIGATION                            |
| (72) UEDA, Akihiro                  | SYSTEM AND THREE-DIMENSIONAL                   | (73) LIRHOT SYSTEMS LTD.              |
| (31) 2014259759                     | DATA ACQUISITION METHOD                        | (72) VOROVITCHIK, Shlomo              |
| (32) 24.12.2014                     | (73) SCANTECH (HANGZHOU) CO., LTD.             | (31) 20111009                         |
| (33) Japan                          | (72) ZHENG, Jun                                | (32) 22.09.2009                       |
| (51) G01B 11/02                     | CHEN, Shangjian                                | (33) Israel                           |
| (11) EP3460386                      | (31) 201610824489                              | (51) G01C 19/5712                     |
| (21) EP18193079.3                   | (32) 14.09.2016                                | (11) EP3407016                        |
| (47) 14.07.2021                     | (33) China                                     | (21) EP18173764.4                     |
| (22) 07.09.2018                     | (51) G01B 11/27                                | (47) 07.07.2021                       |
| (54) DISPLACEMENT SENSOR            | G01C 15/00                                     | (22) 23.05.2018                       |
| (73) Yokogawa Electric Corporation  | G01C 25/00                                     | (54) PIEZOELECTRIC GYROSCOPE WITH     |
| (72) CHIDA, Naomichi                | (11) EP3236204                                 | TRANSVERSAL DRIVE TRANSDUCER          |
| SETSUDA, Kazuki                     | (21) EP17166159.8                              | (73) Murata Manufacturing Co., Ltd.   |
| NISHIDA, Kazufumi                   | (47) 14.07.2021                                | (72) Kuisma, Heikki                   |
| KATSUYAMA, Jun                      | (22) 12.04.2017                                | (31) 20175469                         |
| (31) 2017177107                     | (54) LEVELABLE ROTATION LASER AND              | 20175467                              |
| (32) 14.09.2017                     | ITS USE FOR MEASURING MACHINE                  | 20175850                              |
| (33) Japan                          | TOOLS                                          | 20175892                              |
| (51) G01B 11/06                     | (73) Status Pro Maschinenmesstechnik           | (32) 24.05.2017                       |
| G01B 21/08                          | GmbH                                           | 24.05.2017                            |
| G01N 25/72                          | (72) FOLEY, David                              | 25.09.2017                            |
| (11) EP3086087                      | KNODE, Burkhard                                | 11.10.2017                            |
| (21) EP15164324.4                   | (31) 102016107100                              | (33) Finland                          |
| (47) 07.07.2021                     | (32) 18.04.2016                                | Finland                               |
| (22) 20.04.2015                     |                                                | Finland                               |

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| Finland                              | (72) AMANO, Hiroshi               | (22) 24.09.2015                               |
| (51) G01C 21/00                      | AKITA, Takashi                    | (54) INTERFACE WITH SECURE                    |
| G06K 9/00                            | TANAKA, Akira                     | INTERMEDIARY PLATFORM TO                      |
| G08G 1/00                            | (31) 2013055574                   | GENERATE DATA COMPATIBLE WITH                 |
| (11) EP3008660                       | (32) 18.03.2013                   | AN EXTERNAL SYSTEM IN AN OIL                  |
| (21) EP14727751.1                    | (33) Japan                        | AND GAS ASSET SUPPLY CHAIN                    |
| (47) 07.07.2021                      | (51) G01C 21/34                   | (73) SICPA HOLDING SA                         |
| (87) EP2014060093                    | G01C 21/36                        | (72) FINKEL, Charles                          |
| 18.12.2014                           | (11) EP3615891                    | CAMPBELL, Mark                                |
| (22) 16.05.2014                      | (21) EP18720581.0                 | VAN NGOC TY, Christophe                       |
| (54) ASSISTANCE DEVICE AND METHOD    | (47) 07.07.2021                   | CASET, Giorgio                                |
| FOR ASSISTING A DRIVER OF A          | (87) EP2018060546                 | KOBLE, Friedrich                              |
| VEHICLE                              | 01.11.2018                        | (31) 201462063534 P                           |
| (73) Robert Bosch GmbH               | (22) 25.04.2018                   | (32) 14.10.2014                               |
| (72) HEIGELE, Christian              | (54) METHOD AND DEVICE FOR        | (33) United States of America                 |
| MIELENZ, Holger                      | GENERATING DYNAMIC INDICATIONS    | (51) G01D 5/14                                |
| (31) 102013211109                    | RELATING TO A MODIFICATION OF     | (11) EP3674668                                |
| (32) 14.06.2013                      | ROUTE GUIDANCE                    | (21) EP19164359.2                             |
| (33) Germany                         | (73) Continental Automotive GmbH  | (47) 07.07.2021                               |
| (51) G01C 21/20                      | (72) LINDEMANN, Robert            | (22) 21.03.2019                               |
| H04W 84/12                           | HELLHUND, Jonas                   | (54) MULTI-TURN ABSOLUTE ENCODER,             |
| H04W 84/18                           | (31) 102017207243                 | ENCODING METHOD AND ROBOT                     |
| H04W 4/02                            | (32) 28.04.2017                   | (73) Innfos Drive (Beijing) Technologies Co., |
| (11) EP3238468                       | (33) Germany                      | Ltd.                                          |
| (21) EP15873882.3                    | (51) G01D 4/00                    | (72) Cui, Haotian                             |
| (47) 14.07.2021                      | G01F 1/66                         | Yan, Xunge                                    |
| (87) US2015055135                    | G01F 15/04                        | Zhu, Wei                                      |
| 30.06.2016                           | G01F 15/06                        | (31) 201811581907                             |
| (22) 12.10.2015                      | G01F 15/075                       | (32) 24.12.2018                               |
| (54) LOCATING SERVICES               | (11) EP3516345                    | (33) China                                    |
| (73) Intel Corporation               | (21) EP17783636.8                 | (51) G01D 5/14                                |
| (72) MORARU, Catalin                 | (47) 07.07.2021                   | G01D 5/20                                     |
| PETRIA, Silviu                       | (87) US2017053332                 | H02K 1/28                                     |
| (31) 201414581824                    | 29.03.2018                        | H02K 29/08                                    |
| (32) 23.12.2014                      | (22) 25.09.2017                   | (11) EP2549631                                |
| (33) United States of America        | (54) EFFICIENT BATTERY-POWERED    | (21) EP12168918.6                             |
| (51) G01C 21/30                      | METER                             | (47) 14.07.2021                               |
| (11) EP3023740                       | (73) Itron, Inc.                  | (22) 22.05.2012                               |
| (21) EP15190682.3                    | (72) ILIEV, George                | (54) Holding structure of sensing magnet for  |
| (47) 07.07.2021                      | RIGDON, Kenneth, Charles          | EPS motor                                     |
| (22) 21.10.2015                      | DE JAGER, Johann                  | (73) LG Innotech Co., Ltd.                    |
| (54) METHOD, APPARATUS AND           | (31) 201662399799 P               | (72) Kim, Taehwan                             |
| COMPUTER PROGRAM PRODUCT             | (32) 26.09.2016                   | Woo, Shunghun                                 |
| FOR ROUTE MATCHING                   | (33) United States of America     | Chang, Donggeun                               |
| (73) HERE Global B.V.                | (51) G01D 4/00                    | Kim, Byungyong                                |
| (72) BECKER, Wolfgang                | G01F 1/66                         | (31) 20110072976                              |
| KOPP, Markus                         | G01F 15/06                        | 20110073666                                   |
| (31) 201414528198                    | G01F 15/14                        | 20110073667                                   |
| (32) 30.10.2014                      | G01F 15/18                        | 20110081038                                   |
| (33) United States of America        | H05K 1/14                         | (32) 22.07.2011                               |
| (51) G01C 21/32                      | (11) EP3667259                    | 25.07.2011                                    |
| G08G 1/01                            | (21) EP19214121.6                 | 25.07.2011                                    |
| G09B 29/00                           | (47) 07.07.2021                   | 16.08.2011                                    |
| G09B 29/10                           | (22) 03.12.2013                   | (33) Korea (Republic)                         |
| (11) EP2977724                       | (54) CONSUMPTION METER COMPRISING | Korea (Republic)                              |
| (21) EP14767869.2                    | A FOLDABLE PRINTED CIRCUIT        | Korea (Republic)                              |
| (47) 14.07.2021                      | BOARD ASSEMBLY AND METHOD         | Korea (Republic)                              |
| (87) JP2014001459                    | OF MANUFACTURING SUCH A           | (51) G01D 5/14                                |
| 25.09.2014                           | CONSUMPTION METER                 | G01D 5/245                                    |
| (22) 14.03.2014                      | (73) Apator Miitors ApS           | G01D 5/249                                    |
| (54) MAP INFORMATION CREATION        | (72) DRACHMANN, Jens              | (11) EP3488188                                |
| DEVICE, INFORMATION                  | (51) G01D 4/00                    | (21) EP17745469.1                             |
| PRESENTATION DEVICE, MAP             | H04L 29/06                        | (47) 14.07.2021                               |
| INFORMATION CREATION METHOD          | (11) EP3207681                    | (87) GB2017052125                             |
| AND INFORMATION PROVISION            | (21) EP15777896.0                 | 25.01.2018                                    |
| METHOD                               | (47) 07.07.2021                   | (22) 19.07.2017                               |
| (73) Panasonic Intellectual Property | (87) EP2015071967                 | (54) MAGNETIC POSITION SENSOR                 |
| Management Co., Ltd.                 | 21.04.2016                        | (73) CMR Surgical Limited                     |



|                                                        |                                                                                                                                                                                                                                   |                                                                                                                      |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| (72) ROBERTS, Paul Christopher<br>MOTTRAM, Edward John | G01D 18/00<br>G01L 9/04<br>G01L 27/00<br>G01N 27/22                                                                                                                                                                               | (54) LIGHT SOURCE AND METHOD<br>FOR PRODUCING THE SAME AND<br>POSITION MEASURING DEVICE<br>COMPRISING A LIGHT SOURCE |
| (31) 201612768                                         | (11) EP3483564                                                                                                                                                                                                                    | (73) Dr. Johannes Heidenhain GmbH                                                                                    |
| (32) 22.07.2016                                        | (21) EP18204798.5                                                                                                                                                                                                                 | (72) GÖHRE, Jens-Martin                                                                                              |
| (33) United Kingdom                                    | (47) 14.07.2021                                                                                                                                                                                                                   | HOLLSTEIN, Kai                                                                                                       |
| (51) G01D 5/14                                         | (22) 07.11.2018                                                                                                                                                                                                                   | (51) G01D 5/353                                                                                                      |
| H01H 36/00                                             | (54) METHOD FOR MANUFACTURING A<br>CAPACITIVE SENSOR                                                                                                                                                                              | (11) EP3569987                                                                                                       |
| H03K 17/97                                             | (73) Murata Manufacturing Co., Ltd.                                                                                                                                                                                               | (21) EP19173499.5                                                                                                    |
| (11) EP3707475                                         | (72) Kuisma, Heikki                                                                                                                                                                                                               | (47) 07.07.2021                                                                                                      |
| (21) EP18752728.8                                      | (31) 20176012                                                                                                                                                                                                                     | (22) 09.05.2019                                                                                                      |
| (47) 07.07.2021                                        | (32) 13.11.2017                                                                                                                                                                                                                   | (54) OPTICAL SENSOR SYSTEM                                                                                           |
| (87) EP2018071171                                      | (33) Finland                                                                                                                                                                                                                      | (73) Airbus Operations Limited                                                                                       |
| 16.05.2019                                             | (51) G01D 5/241                                                                                                                                                                                                                   | (72) CIPULLO, Alessio                                                                                                |
| (22) 03.08.2018                                        | (11) EP3760978                                                                                                                                                                                                                    | BARAD, Kavyan                                                                                                        |
| (54) SWITCH HAVING A MAGNET<br>ARRANGEMENT             | (21) EP20191819.0                                                                                                                                                                                                                 | (31) 201807677                                                                                                       |
| (73) Griessbach GmbH                                   | (47) 07.07.2021                                                                                                                                                                                                                   | (32) 11.05.2018                                                                                                      |
| (72) POKRANDT, Christian                               | (22) 26.05.2015                                                                                                                                                                                                                   | (33) United Kingdom                                                                                                  |
| (31) 102017219984                                      | (54) CAPACITIVE COUPLING OF MOVABLE<br>ENTITY WITH DETERMINATION OF<br>RESISTANCE                                                                                                                                                 | (51) G01D 18/00                                                                                                      |
| (32) 09.11.2017                                        | (73) Pragmatic Printing Ltd                                                                                                                                                                                                       | G01D 21/00                                                                                                           |
| (33) Germany                                           | (72) DE OLIVEIRA, Joao                                                                                                                                                                                                            | (11) EP3301406                                                                                                       |
| (51) G01D 5/14                                         | (31) 201409182                                                                                                                                                                                                                    | (21) EP17190352.9                                                                                                    |
| H01H 36/00                                             | 201414916                                                                                                                                                                                                                         | (47) 14.07.2021                                                                                                      |
| H05B 6/06                                              | (32) 23.05.2014                                                                                                                                                                                                                   | (22) 11.09.2017                                                                                                      |
| (11) EP3686560                                         | 21.08.2014                                                                                                                                                                                                                        | (54) USE OF A SYSTEM COMPRISING<br>A MEASURING DEVICE AND AN<br>INSTALLATION                                         |
| (21) EP19154032.7                                      | (33) United Kingdom                                                                                                                                                                                                               | (73) Siemens Aktiengesellschaft                                                                                      |
| (47) 14.07.2021                                        | United Kingdom                                                                                                                                                                                                                    | (72) Jürgens, Dirk                                                                                                   |
| (22) 28.01.2019                                        | (51) G01D 5/244                                                                                                                                                                                                                   | (31) 102016218969                                                                                                    |
| (54) MAGNETIC ATTRACTIVE ROTARY<br>BUTTON SYSTEM       | (11) EP3527950                                                                                                                                                                                                                    | (32) 30.09.2016                                                                                                      |
| (73) Melexis Technologies SA                           | (21) EP18206233.1                                                                                                                                                                                                                 | (33) Germany                                                                                                         |
| (72) WANG, Hao                                         | (47) 07.07.2021                                                                                                                                                                                                                   | (51) G01F 1/58                                                                                                       |
| (51) G01D 5/20                                         | (22) 14.11.2018                                                                                                                                                                                                                   | (11) EP2923181                                                                                                       |
| (11) EP3514502                                         | (54) BEARING-FREE ANGLE<br>MEASUREMENT DEVICE                                                                                                                                                                                     | (21) EP13783585.6                                                                                                    |
| (21) EP19152812.4                                      | (73) Dr. Johannes Heidenhain GmbH                                                                                                                                                                                                 | (47) 14.07.2021                                                                                                      |
| (47) 14.07.2021                                        | (72) THALER, Josef                                                                                                                                                                                                                | (87) EP2013072562                                                                                                    |
| (22) 21.01.2019                                        | STRASSER, Erich                                                                                                                                                                                                                   | 30.05.2014                                                                                                           |
| (54) INDUCTIVE POSITION SENSOR                         | (31) 102018202239                                                                                                                                                                                                                 | (22) 29.10.2013                                                                                                      |
| (73) Melexis Technologies SA                           | (32) 14.02.2018                                                                                                                                                                                                                   | (54) ELECTROMAGNETIC FLOWMETER                                                                                       |
| (72) KLUGE, Wolfram                                    | (33) Germany                                                                                                                                                                                                                      | (73) Endress+Hauser Flowtec AG                                                                                       |
| LUGANI, Lorenzo                                        | (51) G01D 5/244                                                                                                                                                                                                                   | (72) GRAF, Oliver                                                                                                    |
| (31) 18152820                                          | G01D 5/347                                                                                                                                                                                                                        | (31) 202012104525 U                                                                                                  |
| 18152828                                               | (11) EP3736542                                                                                                                                                                                                                    | (32) 22.11.2012                                                                                                      |
| 18152825                                               | (21) EP19173237.9                                                                                                                                                                                                                 | (33) Germany                                                                                                         |
| 18152822                                               | (47) 07.07.2021                                                                                                                                                                                                                   | (51) G01F 1/66                                                                                                       |
| (32) 22.01.2018                                        | (22) 08.05.2019                                                                                                                                                                                                                   | (11) EP2914937                                                                                                       |
| 22.01.2018                                             | (54) ASSEMBLY FOR FIXING AN END<br>OF A SUPPORT EXTENDING IN A<br>LONGITUDINAL DIRECTION WITH<br>A MEASUREMENT POINT FOR<br>POSITION MEASUREMENT AT LEAST<br>IN A LONGITUDINAL DIRECTION<br>ON AN ATTACHMENT FACE OF A<br>CARRIER | (21) EP13785759.5                                                                                                    |
| 22.01.2018                                             | (73) Dr. Johannes Heidenhain GmbH                                                                                                                                                                                                 | (47) 07.07.2021                                                                                                      |
| (33) European Patent Office (EPO)                      | (72) MAYER, Reinhard                                                                                                                                                                                                              | (87) US2013065816                                                                                                    |
| European Patent Office (EPO)                           | MITTERLEITNER, Josef                                                                                                                                                                                                              | 08.05.2014                                                                                                           |
| European Patent Office (EPO)                           | PUCHER, Wolfgang                                                                                                                                                                                                                  | (22) 21.10.2013                                                                                                      |
| European Patent Office (EPO)                           | (51) G01D 5/347                                                                                                                                                                                                                   | (54) ULTRASONIC WAVEGUIDE                                                                                            |
| (51) G01D 5/20                                         | (11) EP3745090                                                                                                                                                                                                                    | (73) General Electric Company                                                                                        |
| (11) EP3531076                                         | (21) EP19176650.0                                                                                                                                                                                                                 | (72) AO, Xiaolei, Shirley                                                                                            |
| (21) EP19158961.3                                      | (47) 14.07.2021                                                                                                                                                                                                                   | KHRAKOVSKY, Oleg, Alexander                                                                                          |
| (47) 14.07.2021                                        | (22) 27.05.2019                                                                                                                                                                                                                   | MA, Yue                                                                                                              |
| (22) 22.02.2019                                        |                                                                                                                                                                                                                                   | (31) 201213668984                                                                                                    |
| (54) ANGLE SENSOR USING EDDY<br>CURRENTS               |                                                                                                                                                                                                                                   | (32) 05.11.2012                                                                                                      |
| (73) Allegro MicroSystems, LLC                         |                                                                                                                                                                                                                                   | (33) United States of America                                                                                        |
| (72) Latham, Alexander                                 |                                                                                                                                                                                                                                   | (51) G01F 1/66                                                                                                       |
| Klebanov, Maxim                                        |                                                                                                                                                                                                                                   | G01F 15/14                                                                                                           |
| (31) 201862634370 P                                    |                                                                                                                                                                                                                                   | E21B 47/10                                                                                                           |
| (32) 23.02.2018                                        |                                                                                                                                                                                                                                   | (11) EP3137855                                                                                                       |
| (33) United States of America                          |                                                                                                                                                                                                                                   | (21) EP15786365.5                                                                                                    |
| (51) G01D 5/24                                         |                                                                                                                                                                                                                                   | (47) 07.07.2021                                                                                                      |

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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| (87) US2015027354<br>05.11.2015                                                                                                                                                | (33) Japan                                                                               | (54) DEVICE FOR MEASURING DENSITY                                                       |
| (22) 23.04.2015                                                                                                                                                                | (51) G01F 1/692                                                                          | (73) Endress+Hauser Flowtec AG                                                          |
| (54) ACOUSTICALLY ISOLATED<br>ULTRASONIC TRANSDUCER<br>HOUSING AND FLOW METER                                                                                                  | G01F 1/696                                                                               | (72) HUBER, Christof                                                                    |
| (73) Sensia Netherlands B.V.                                                                                                                                                   | (11) EP3455595                                                                           | KUMAR, Vivek                                                                            |
| (72) GOTTLIEB, Emanuel J.                                                                                                                                                      | (21) EP17719614.4                                                                        | SCHWER, Tobias                                                                          |
| MINNOCK, Kevin P.                                                                                                                                                              | (47) 07.07.2021                                                                          | MONTSKO, Philipp                                                                        |
| AUGENSTEIN, Donald R.                                                                                                                                                          | (87) EP2017060074                                                                        | (31) 102013113689                                                                       |
| ZUCKERMAN, Richard A.                                                                                                                                                          | 16.11.2017                                                                               | (32) 09.12.2013                                                                         |
| (31) 201414262781                                                                                                                                                              | (22) 27.04.2017                                                                          | (33) Germany                                                                            |
| (32) 27.04.2014                                                                                                                                                                | (54) THERMAL FLOW SENSOR                                                                 | (51) G01F 11/08                                                                         |
| (33) United States of America                                                                                                                                                  | (73) Innovative Sensor Technology IST AG                                                 | (11) EP3315924                                                                          |
| (51) G01F 1/66                                                                                                                                                                 | (72) HOLOUBEK, Jiri                                                                      | (21) EP16195534.9                                                                       |
| G01F 15/14                                                                                                                                                                     | (31) 102016108625                                                                        | (47) 14.07.2021                                                                         |
| G01P 1/02                                                                                                                                                                      | (32) 10.05.2016                                                                          | (22) 25.10.2016                                                                         |
| G01P 5/24                                                                                                                                                                      | (33) Germany                                                                             | (54) LIQUID DOSING APPARATUS                                                            |
| (11) EP3350603                                                                                                                                                                 | (51) G01F 1/74                                                                           | (73) The Procter & Gamble Company                                                       |
| (21) EP16766063.8                                                                                                                                                              | G01F 1/84                                                                                | (72) HOEFTE, Paulus Antonius Augustinus                                                 |
| (47) 14.07.2021                                                                                                                                                                | G01F 15/02                                                                               | (51) G01F 17/00                                                                         |
| (87) GB2016052796                                                                                                                                                              | (11) EP3403058                                                                           | (11) EP3004814                                                                          |
| 23.03.2017                                                                                                                                                                     | (21) EP16701392.9                                                                        | (21) EP14731049.4                                                                       |
| (22) 09.09.2016                                                                                                                                                                | (47) 07.07.2021                                                                          | (47) 07.07.2021                                                                         |
| (54) WIND SENSOR HOUSING AND WIND<br>SENSOR COMPRISING SUCH A<br>HOUSING                                                                                                       | (87) US2016013172                                                                        | (87) IB2014061447                                                                       |
| (73) FT Technologies (UK) Ltd                                                                                                                                                  | 20.07.2017                                                                               | 27.11.2014                                                                              |
| (72) STRACHAN, Robin                                                                                                                                                           | (22) 13.01.2016                                                                          | (22) 15.05.2014                                                                         |
| (31) 201516320                                                                                                                                                                 | (54) MULTI-PHASE CORIOLIS<br>MEASUREMENT DEVICE AND<br>METHOD                            | (54) APPARATUS AND METHOD FOR<br>MEASURING AN INTERNAL VOLUME<br>OF A MOULD             |
| (32) 15.09.2015                                                                                                                                                                | (73) Micro Motion, Inc.                                                                  | (73) Hypertec Solution S.r.l.                                                           |
| (33) United Kingdom                                                                                                                                                            | (72) DUTTON, Robert E.                                                                   | (72) BARBANTI, Giovanni                                                                 |
| (51) G01F 1/66                                                                                                                                                                 | (51) G01F 1/84                                                                           | BASSI, Gino                                                                             |
| G01N 15/00                                                                                                                                                                     | (11) EP2279392                                                                           | (31) BO20130258                                                                         |
| G01N 29/032                                                                                                                                                                    | (21) EP08744911.2                                                                        | (32) 24.05.2013                                                                         |
| G01N 29/44                                                                                                                                                                     | (47) 14.07.2021                                                                          | (33) Italy                                                                              |
| (11) EP3637098                                                                                                                                                                 | (87) US2008059101                                                                        | (51) G01F 23/00                                                                         |
| (21) EP19000357.4                                                                                                                                                              | 08.10.2009                                                                               | G01F 23/284                                                                             |
| (47) 14.07.2021                                                                                                                                                                | (22) 02.04.2008                                                                          | (11) EP3517902                                                                          |
| (22) 01.08.2019                                                                                                                                                                | (54) BRACE BAR WITH A PARTIAL BOND                                                       | (21) EP18153623.6                                                                       |
| (54) MEASURING METHOD AND<br>MEASURING ARRANGEMENT<br>FOR MEASURING PARTICLE SIZE<br>DISTRIBUTION AND PARTICLE<br>CONCENTRATION IN A CONDUIT<br>WITH LIQUID FLOWING THROUGH IT | (73) Micro Motion, Inc.                                                                  | (47) 07.07.2021                                                                         |
| (73) Nivus GmbH                                                                                                                                                                | (72) HONEGGER, Allen                                                                     | (22) 26.01.2018                                                                         |
| (72) KIBROM, Asmorom                                                                                                                                                           | (51) G01F 1/84                                                                           | (54) METHOD FOR DETERMINING AND<br>DISPLAYING A REMAINING FILLING<br>OR EMPTYING PERIOD |
| FRANÇOIS, Pierre                                                                                                                                                               | G01F 15/00                                                                               | (73) VEGA Grieshaber KG                                                                 |
| (31) 102018006084                                                                                                                                                              | G01F 15/14                                                                               | (72) Laun, Robert                                                                       |
| (32) 02.08.2018                                                                                                                                                                | G01F 15/18                                                                               | (51) G01F 23/24                                                                         |
| (33) Germany                                                                                                                                                                   | H05K 5/06                                                                                | G01F 23/26                                                                              |
| (51) G01F 1/684                                                                                                                                                                | (11) EP2850400                                                                           | G01F 23/296                                                                             |
| (11) EP3012599                                                                                                                                                                 | (21) EP12724480.4                                                                        | G01F 25/00                                                                              |
| (21) EP14813464.6                                                                                                                                                              | (47) 14.07.2021                                                                          | (11) EP3390985                                                                          |
| (47) 07.07.2021                                                                                                                                                                | (87) US2012038419                                                                        | (21) EP16805407.0                                                                       |
| (87) JP2014052615                                                                                                                                                              | 21.11.2013                                                                               | (47) 14.07.2021                                                                         |
| 24.12.2014                                                                                                                                                                     | (22) 17.05.2012                                                                          | (87) EP2016079485                                                                       |
| (22) 05.02.2014                                                                                                                                                                | (54) FLAMEPROOF ELECTRICAL FEED-<br>THROUGH AND METHOD OF<br>FORMING SUCH A FEED-THROUGH | 22.06.2017                                                                              |
| (54) PHYSICAL QUANTITY MEASURING<br>APPARATUS                                                                                                                                  | (73) Micro Motion, Inc.                                                                  | (22) 01.12.2016                                                                         |
| (73) Hitachi Automotive Systems, Ltd.                                                                                                                                          | (72) MANSFIELD, William M.                                                               | (54) ELECTRONIC UNIT WITH DIAGNOSIS<br>FUNCTION                                         |
| (72) ISOYA, Yuki                                                                                                                                                               | MCANALLY, Craig B.                                                                       | (73) Endress+Hauser SE+Co. KG                                                           |
| HOSHIOKA, Hiroaki                                                                                                                                                              | SHANAHAN, Shaun E.                                                                       | (72) DÖTSCH, Michael                                                                    |
| YOGO, Takayuki                                                                                                                                                                 | WOOLF, Richard L.                                                                        | FERRARO, Franco                                                                         |
| MIKI, Takahiro                                                                                                                                                                 | (51) G01F 1/84                                                                           | LEISINGER, Ralf                                                                         |
| (31) 2013129123                                                                                                                                                                | G01N 9/00                                                                                | MONSE, Benjamin                                                                         |
| (32) 20.06.2013                                                                                                                                                                | G01N 11/16                                                                               | (31) 102015122284                                                                       |
|                                                                                                                                                                                | (11) EP3080560                                                                           | (32) 18.12.2015                                                                         |
|                                                                                                                                                                                | (21) EP14793095.2                                                                        | (33) Germany                                                                            |
|                                                                                                                                                                                | (47) 14.07.2021                                                                          | (51) G01F 23/26                                                                         |
|                                                                                                                                                                                | (87) EP2014073520                                                                        | G01F 25/00                                                                              |
|                                                                                                                                                                                | 18.06.2015                                                                               | (11) EP3457096                                                                          |
|                                                                                                                                                                                | (22) 03.11.2014                                                                          |                                                                                         |

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|------------------------------------|--------------------------------------------|---------------------------------------------|
| (21) EP18193691.5                  | (11) EP3440441                             | (72) CUNNINGGS, Joseph, Oliver              |
| (47) 07.07.2021                    | (21) EP17712426.0                          | (51) G01H 1/00                              |
| (22) 11.09.2018                    | (47) 14.07.2021                            | G05B 23/02                                  |
| (54) IMPROVED PROBE FOR FILL       | (87) EP2017055461                          | (11) EP3702863                              |
| LIMITING DEVICE FOR PETROLEUM      | 12.10.2017                                 | (21) EP20156992.8                           |
| FUEL TRANSPORT TANK AND            | (22) 08.03.2017                            | (47) 14.07.2021                             |
| CORRESPONDING FILL LIMITING        | (54) METHOD FOR TRANSPORTING A             | (22) 12.02.2020                             |
| DEVICE                             | MATERIAL, MULTI-DIMENSIONAL                | (54) MONITORING DEVICE, MONITORING          |
| (73) INTERSENS                     | DRIVE, AND PROCESSING DEVICE               | METHOD, METHOD OF CREATING                  |
| (72) MOREL-FATIO, Bruno            | (73) Syntegon Technology GmbH              | SHAFT VIBRATION DETERMINATION               |
| (31) 1758479                       | (72) PANCRAS, Wilco                        | MODEL, AND PROGRAM                          |
| 1850350                            | HANISCH, Markus                            | (73) Mitsubishi Heavy Industries Compressor |
| (32) 13.09.2017                    | PHAN, Huu-Thanh                            | Corporation                                 |
| 16.01.2018                         | PHILIPP, Andre                             | (72) SABURI, Satoshi                        |
| (33) France                        | (31) 102016205513                          | OGASAWARA, Ryoji                            |
| France                             | (32) 04.04.2016                            | (31) 2019033539                             |
| (51) G01F 23/72                    | (33) Germany                               | (32) 27.02.2019                             |
| G01F 23/74                         | (51) G01G 19/03                            | (33) Japan                                  |
| (11) EP3499196                     | (11) EP3385683                             | (51) G01H 3/00                              |
| (21) EP17838284.2                  | (21) EP18166179.4                          | H01R 13/641                                 |
| (47) 14.07.2021                    | (47) 07.07.2021                            | (11) EP3638993                              |
| (87) CN2017070497                  | (22) 06.04.2018                            | (21) EP18728571.3                           |
| 15.02.2018                         | (54) WEIGHING SYSTEM                       | (47) 07.07.2021                             |
| (22) 06.01.2017                    | (73) WIPOTEC GmbH                          | (87) EP2018063772                           |
| (54) LIQUID LEVEL DETECTION METHOD | (72) Düppre, Theo                          | 20.12.2018                                  |
| AND LIQUID LEVEL SENSOR            | (31) 102017107586                          | (22) 25.05.2018                             |
| (73) Dongguan Zhengyang Electronic | (32) 07.04.2017                            | (54) CLOSURE DETECTION SYSTEM               |
| Mechanical Co., Ltd.               | (33) Germany                               | (73) Robert Bosch GmbH                      |
| (72) KU, Yi-Hsin                   | (51) G01G 19/08                            | (72) CASARI, John                           |
| (31) 201610657209                  | (11) EP2829854                             | GUZMAN ESCALANTE, Alfonso                   |
| (32) 11.08.2016                    | (21) EP14177506.4                          | Emmanuel                                    |
| (33) China                         | (47) 07.07.2021                            | NOYOLA IBARRA, Luis Daniel                  |
| (51) G01G 17/00                    | (22) 17.07.2014                            | (31) 201715621747                           |
| G01G 23/37                         | (54) A method of weighing a load           | (32) 13.06.2017                             |
| (11) EP3191809                     | (73) J.C. Bamford Excavators Ltd.          | (33) United States of America               |
| (21) EP15770993.2                  | (72) Ellis, Luke Francis                   | (51) G01J 1/00                              |
| (47) 07.07.2021                    | Argentieri, Luciano                        | G01N 21/00                                  |
| (87) US2015048940                  | Brooks, Richard                            | G01N 21/65                                  |
| 17.03.2016                         | (31) 201313376                             | G01N 27/447                                 |
| (22) 08.09.2015                    | (32) 26.07.2013                            | G01N 30/00                                  |
| (54) SYSTEM AND METHOD FOR         | (33) United Kingdom                        | G01N 30/50                                  |
| PREPARING A PHARMACEUTICAL         | (51) G01G 23/14                            | G06K 9/00                                   |
| COMPOUND                           | (11) EP3505879                             | G01N 21/35                                  |
| (73) Becton, Dickinson and Company | (21) EP18205175.5                          | G06F 17/00                                  |
| (72) SANDMANN, Christian           | (47) 07.07.2021                            | G16C 20/20                                  |
| THOMAS, Matt                       | (22) 08.11.2018                            | (11) EP2859313                              |
| MURRAY, Chris                      | (54) FOOD PROCESSING SYSTEM AND            | (21) EP13796460.7                           |
| HANKE, Christian                   | METHOD WITH DETERMINATION OF               | (47) 07.07.2021                             |
| HOERNER, Helmut                    | VARIABLE TARE WEIGHT                       | (87) US2013043421                           |
| TANNEN, Robert                     | (73) Weber Maschinenbau GmbH               | 05.12.2013                                  |
| TURPAULT, Mathieu                  | Breidenbach                                | (22) 30.05.2013                             |
| WITT, Erik, Kurt                   | (31) 102017131342                          | (54) SYSTEM AND METHOD FOR                  |
| (31) 201462047325 P                | (32) 27.12.2017                            | DETERMINING THE PRESENCE OF                 |
| 201462072160 P                     | (33) Germany                               | SPECTRAL COMPONENTS IN THE                  |
| 201462072054 P                     | (51) G01H 1/00                             | SPECTRA OF MIXTURE                          |
| 201462078067 P                     | G01M 17/007                                | (73) Jackson, Richard                       |
| 201462077968 P                     | (11) EP2948744                             | Wang, Qian                                  |
| (32) 08.09.2014                    | (21) EP13872715.1                          | (72) Jackson, Richard                       |
| 29.10.2014                         | (47) 07.07.2021                            | Wang, Qian                                  |
| 29.10.2014                         | (87) US2013022450                          | (31) 201261653743 P                         |
| 11.11.2014                         | 31.07.2014                                 | (32) 31.05.2012                             |
| 11.11.2014                         | (22) 22.01.2013                            | (33) United States of America               |
| (33) United States of America      | (54) DETERMINING A REMEDIAL ACTION         | (51) G01J 1/04                              |
| United States of America           | FOR A MOTORIZED VEHICLE BASED              | G01J 1/42                                   |
| United States of America           | ON SENSED VIBRATION                        | G01J 3/02                                   |
| United States of America           | (73) Ent. Services Development Corporation | G01J 3/18                                   |
| United States of America           | LP                                         | G01J 3/28                                   |
| (51) G01G 19/00                    |                                            | G01J 3/50                                   |

|                                      |                                                 |                               |
|--------------------------------------|-------------------------------------------------|-------------------------------|
| G01J 5/00                            | 2009260259                                      | (31) 201700109143             |
| G01J 5/02                            | (32) 30.03.2009                                 | (32) 29.09.2017               |
| G01J 5/08                            | 13.11.2009                                      | (33) Italy                    |
| G01J 5/34                            | (33) Japan                                      | (51) G01J 3/02                |
| H01L 31/0328                         | Japan                                           | G01J 3/26                     |
| H01L 31/09                           | (51) G01J 3/02                                  | G01J 3/45                     |
| (11) EP3486954                       | G01J 3/10                                       | G01J 5/04                     |
| (21) EP17827210.0                    | G01J 3/44                                       | G01J 5/20                     |
| (47) 14.07.2021                      | G01J 5/08                                       | G02B 26/00                    |
| (87) JP2017015832                    | G01J 5/12                                       | (11) EP3064912                |
| 18.01.2018                           | G01N 21/65                                      | (21) EP14857161.5             |
| (22) 20.04.2017                      | G01N 33/22                                      | (47) 07.07.2021               |
| (54) ELECTROMAGNETIC WAVE            | (11) EP3559617                                  | (87) JP2014079106             |
| DETECTOR AND ELECTROMAGNETIC         | (21) EP17808428.1                               | 07.05.2015                    |
| WAVE DETECTOR ARRAY                  | (47) 07.07.2021                                 | (22) 31.10.2014               |
| (73) Mitsubishi Electric Corporation | (87) EP2017080968                               | (54) LIGHT-DETECTING DEVICE   |
| (72) OGAWA, Shimpei                  | 28.06.2018                                      | (73) Hamamatsu Photonics K.K. |
| FUJISAWA, Daisuke                    | (22) 30.11.2017                                 | (72) SHIBAYAMA Katsumi        |
| SHIMATANI, Masaaki                   | (54) OPTIMISED METHOD FOR                       | KASAHARA Takashi              |
| OKUDA, Satoshi                       | DETECTING THE FORMATION OF GAS                  | HIROSE Masaki                 |
| (31) 2016137676                      | HYDRATES                                        | KAWAI Toshimitsu              |
| (32) 12.07.2016                      | (73) IFP Energies nouvelles                     | (31) 2013227287               |
| (33) Japan                           | (72) DELPOUX, Olivier                           | (32) 31.10.2013               |
| (51) G01J 1/44                       | FROT, Didier                                    | (33) Japan                    |
| G01S 7/487                           | SINQUIN, Anne                                   | (51) G01J 3/02                |
| G01S 7/497                           | SAGNARD, Corinne                                | G01J 3/26                     |
| G01S 17/42                           | LACHET, Véronique                               | G01J 3/45                     |
| H01L 31/02                           | (31) 1662982                                    | G01J 5/04                     |
| G01S 7/4863                          | (32) 21.12.2016                                 | G01J 5/20                     |
| G01S 7/4865                          | (33) France                                     | G02B 26/00                    |
| G01S 17/10                           | (51) G01J 3/02                                  | (11) EP3064913                |
| G01S 17/18                           | G01J 3/18                                       | (21) EP14857901.4             |
| G01S 17/894                          | G01J 3/44                                       | (47) 14.07.2021               |
| (11) EP3611535                       | G01N 21/27                                      | (87) JP2014079103             |
| (21) EP19187266.2                    | G01N 21/64                                      | 07.05.2015                    |
| (47) 14.07.2021                      | (11) EP3535567                                  | (22) 31.10.2014               |
| (22) 19.07.2019                      | (21) EP17890531.1                               | (54) LIGHT-DETECTING DEVICE   |
| (54) DETECTION OF LIGHT WITH         | (47) 07.07.2021                                 | (73) Hamamatsu Photonics K.K. |
| A PLURALITY OF AVALANCHE             | (87) US2017065606                               | (72) SHIBAYAMA, Katsumi       |
| PHOTODIODE ELEMENTS                  | 12.07.2018                                      | KASAHARA, Takashi             |
| (73) SICK AG                         | (22) 11.12.2017                                 | HIROSE, Masaki                |
| (72) Steinkogler, Dr. Sascha         | (54) SOLID INSPECTION APPARATUS                 | KAWAI, Toshimitsu             |
| Marra, Martin                        | AND METHOD OF USING THE SOLID                   | (31) 2013227286               |
| Clemens, Klaus                       | INSPECTION APPARATUS                            | (32) 31.10.2013               |
| (31) 102018120141                    | (73) Illumina, Inc.                             | (33) Japan                    |
| (32) 17.08.2018                      | (72) EARNEY, John Gerhardt                      | (51) G01J 3/02                |
| (33) Germany                         | PINTO, Joseph Francis                           | G01J 3/42                     |
| (51) G01J 3/02                       | BOWEN, M. Shane                                 | G01J 5/02                     |
| G01J 3/04                            | GRAIGE, Michael S.                              | G01J 5/08                     |
| G01J 3/26                            | PITERA, Arthur                                  | G01J 5/12                     |
| G01J 3/28                            | VENKATESAN, Bala Murali K.                      | G01N 21/03                    |
| G01J 3/36                            | YUAN, Dajun                                     | G01N 33/00                    |
| G01J 3/51                            | (31) 201762443675 P                             | G01N 21/3504                  |
| (11) EP2414796                       | (32) 07.01.2017                                 | (11) EP3465150                |
| (21) EP10758758.6                    | (33) United States of America                   | (21) EP17727317.4             |
| (47) 14.07.2021                      | (51) G01J 3/02                                  | (47) 14.07.2021               |
| (87) JP2010055781                    | G01J 3/26                                       | (87) GB2017051467             |
| 07.10.2010                           | (11) EP3688425                                  | 07.12.2017                    |
| (22) 24.03.2010                      | (21) EP18783101.1                               | (22) 25.05.2017               |
| (54) SPECTRAL CHARACTERISTIC         | (47) 14.07.2021                                 | (54) A CHEMICAL SENSOR        |
| OBTAINING APPARATUS, IMAGE           | (87) IB2018056829                               | (73) AMS Sensors UK Limited   |
| EVALUATION APPARATUS AND IMAGE       | 04.04.2019                                      | (72) HOPPER, Richard Henry    |
| FORMING APPARATUS                    | (22) 07.09.2018                                 | DE LUCA, Andrea               |
| (73) Ricoh Company Ltd.              | (54) AN ARRANGEMENT FOR ENHANCING               | LEDINS, Kaspars               |
| (72) SEO, Manabu                     | SPECTRAL CONTRAST IN A VIPA                     | ALI, Syed Zeeshan             |
| KAMIJO, Naohiro                      | SPECTROMETER                                    | CHOWDHURY, Mohamed Foyso      |
| SHIMBO, Kohei                        | (73) Fondazione Istituto Italiano di Tecnologia | (31) 201615168562             |
| (31) 2009081986                      | (72) ANTONACCI, Giuseppe                        | (32) 31.05.2016               |

|                                              |                                      |                                               |
|----------------------------------------------|--------------------------------------|-----------------------------------------------|
| (33) United States of America                | (72) HANDEREK, Vincent               | (54) COIL ACTUATED PRESSURE SENSOR            |
| (51) G01J 3/28                               | YAU, Alan                            | (73) Allegro MicroSystems, LLC                |
| G01J 3/433                                   | (31) 201618036                       | Commissariat à l'Énergie Atomique et          |
| G01J 3/453                                   | (32) 25.10.2016                      | aux Énergies Alternatives                     |
| G01J 11/00                                   | (33) United Kingdom                  | (72) LATHAM, Alexander                        |
| H01S 3/00                                    | (51) G01L 1/18                       | DOOGUE, Michael, C.                           |
| (11) EP2672244                               | G01L 9/00                            | FERMON, Claude                                |
| (21) EP13168800.4                            | H01L 41/08                           | DU HAMEL DE MILLY, Xavier                     |
| (47) 14.07.2021                              | C09D 11/106                          | PANNETIER-LECOEUR, Myriam                     |
| (22) 22.05.2013                              | C09D 11/30                           | (31) 201715606362                             |
| (54) Phase-locked delay device including two | C09D 11/52                           | (32) 26.05.2017                               |
| optical wedge pairs                          | (11) EP3397702                       | (33) United States of America                 |
| (73) Politecnico Di Milano                   | (21) EP17700897.6                    | (51) G01L 11/02                               |
| CONSIGLIO NAZIONALE DELLE                    | (47) 14.07.2021                      | (11) EP2977738                                |
| RICERCHE                                     | (87) EP2017050040                    | (21) EP15177478.3                             |
| (72) Brida, Daniele                          | 06.07.2017                           | (47) 07.07.2021                               |
| Cerullo, Giulio Nicola Felice                | (22) 02.01.2017                      | (22) 20.07.2015                               |
| Manzoni, Cristian Angelo                     | (54) PIEZORESISTIVE INK, METHODS AND | (54) SYSTEMS AND METHODS FOR                  |
| (31) 201213490862                            | USES THEREOF                         | DISTRIBUTED PRESSURE SENSING                  |
| (32) 07.06.2012                              | (73) Universidade do Minho           | (73) General Electric Company                 |
| (33) United States of America                | Dynasol Elastomers S.A.              | (72) Challener, William Albert                |
| (51) G01J 5/00                               | (72) LANCEROS MENDEZ, Senen          | Palit, Sabarni                                |
| G01J 5/02                                    | RIBEIRO DA COSTA, Pedro Filipe       | (31) 201414336105                             |
| G01J 5/04                                    | FERREIRA OLIVEIRA, Juliana Alice     | (32) 21.07.2014                               |
| G01J 5/08                                    | FERREIRA GONÇALVES, Bruna            | (33) United States of America                 |
| G08B 13/19                                   | CORONA GALVÁN, Sergio                | (51) G01L 19/08                               |
| H02G 3/12                                    | (31) 2015109061                      | G08B 23/00                                    |
| H02G 3/20                                    | (32) 29.12.2015                      | G06Q 10/08                                    |
| (11) EP2650849                               | (33) Portugal                        | G06Q 50/28                                    |
| (21) EP13153551.0                            | (51) G01L 3/10                       | G01K 1/14                                     |
| (47) 07.07.2021                              | (11) EP3287757                       | G01K 13/00                                    |
| (22) 31.01.2013                              | (21) EP16199752.3                    | (11) EP3291155                                |
| (54) Built-in passive infrared sensor device | (47) 07.07.2021                      | (21) EP17189412.4                             |
| (73) Steinel GmbH                            | (22) 21.11.2016                      | (47) 14.07.2021                               |
| (72) Sehlhoff, Stefan                        | (54) SYSTEM AND METHOD FOR           | (22) 05.09.2017                               |
| (31) 202012101356 U                          | MEASURING TORQUE ON A                | (54) METHOD FOR MONITORING A                  |
| (32) 13.04.2012                              | ROTATING COMPONENT                   | BOTTLE OF FOOD PRODUCT, IN                    |
| (33) Germany                                 | (73) General Electric Company        | PARTICULAR OF AN ALCOHOLIC                    |
| (51) G01K 7/42                               | (72) LIU, Dan Tho                    | BEVERAGE                                      |
| G06F 1/20                                    | WILHELM, Brant                       | (73) L'Effervescence des Marques              |
| (11) EP3510371                               | (31) 201615248180                    | (72) REVILLON, Delphine                       |
| (21) EP17764686.6                            | (32) 26.08.2016                      | LOONIS, Nicolas                               |
| (47) 14.07.2021                              | (33) United States of America        | (31) 1658222                                  |
| (87) US2017046967                            | (51) G01L 5/00                       | (32) 05.09.2016                               |
| 15.03.2018                                   | G01P 15/03                           | (33) France                                   |
| (22) 15.08.2017                              | (11) EP2718731                       | (51) G01M 3/00                                |
| (54) TEMPORAL TEMPERATURE                    | (21) EP12797351.9                    | G01M 3/40                                     |
| SENSOR POSITION OFFSET ERROR                 | (47) 07.07.2021                      | (11) EP2669649                                |
| CORRECTION                                   | (87) US2012040011                    | (21) EP13275131.4                             |
| (73) Qualcomm Incorporated                   | 13.12.2012                           | (47) 14.07.2021                               |
| (72) MERRIKH, Ali Akbar                      | (22) 30.05.2012                      | (22) 31.05.2013                               |
| SAINT-LAURENT, Martin                        | (54) IMPACT INDICATOR                | (54) Electro-scan integration into video pipe |
| GHASEMAZAR, Mohammad                         | (73) Shockwatch, Inc.                | inspection vehicle                            |
| CHANDRA, Rajit                               | (72) BRANCH, Clinton, A.             | (73) Electro Scan, Inc.                       |
| ALLAM, Mohamed                               | (31) 201161495400 P                  | (72) Hansen, Charles                          |
| (31) 201615260194                            | 201161522562 P                       | Harris, Robert Jackson                        |
| (32) 08.09.2016                              | (32) 10.06.2011                      | (31) 201261689248 P                           |
| (33) United States of America                | 11.08.2011                           | (32) 01.06.2012                               |
| (51) G01K 11/32                              | (33) United States of America        | (33) United States of America                 |
| (11) EP3532814                               | United States of America             | (51) G01M 5/00                                |
| (21) EP17792144.2                            | (51) G01L 9/00                       | G01M 7/00                                     |
| (47) 14.07.2021                              | G01L 13/02                           | (11) EP3531098                                |
| (87) GB2017053214                            | (11) EP3631397                       | (21) EP18213321.5                             |
| 03.05.2018                                   | (21) EP18723195.6                    | (47) 14.07.2021                               |
| (22) 25.10.2017                              | (47) 14.07.2021                      | (22) 18.12.2018                               |
| (54) DISTRIBUTED OPTICAL                     | (87) US2018028476                    | (54) METHOD FOR MONITORING AND                |
| TEMPERATURE SENSOR                           | 29.11.2018                           | DETECTING THE FORMATION OF                    |
| (73) Fotech Group Limited                    | (22) 20.04.2018                      | DEGRADATION IN AT LEAST ONE                   |

|                                                                                 |                                                                                                                                                                         |                                                                                     |
|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| MOVING PART OF A ROTATING MECHANISM AND ASSOCIATED SYSTEM                       | F16N 29/00                                                                                                                                                              | (33) United States of America                                                       |
| (73) Airbus Helicopters                                                         | G01M 11/08                                                                                                                                                              | (51) G01N 1/28                                                                      |
| (72) MOREL, Hervé                                                               | G01N 21/85                                                                                                                                                              | G01N 35/00                                                                          |
| RODRIGUEZ, Jonathan                                                             | G01N 21/94                                                                                                                                                              | (11) EP3647763                                                                      |
| (31) 1870202                                                                    | H04N 7/18                                                                                                                                                               | (21) EP18203184.9                                                                   |
| (32) 26.02.2018                                                                 | F16H 57/01                                                                                                                                                              | (47) 14.07.2021                                                                     |
| (33) France                                                                     | F16H 57/037                                                                                                                                                             | (22) 29.10.2018                                                                     |
| (51) G01M 5/00                                                                  | F16H 57/04                                                                                                                                                              | (54) A METHOD OF PREPARING A BIOLOGICAL SAMPLE FOR STUDY IN AN ANALYSIS DEVICE      |
| G01N 3/00                                                                       | G01M 13/02                                                                                                                                                              | (73) FEI Company                                                                    |
| G01N 3/06                                                                       | (11) EP3467466                                                                                                                                                          | (72) Konijnenberg, Albert                                                           |
| G01N 29/04                                                                      | (21) EP16838081.4                                                                                                                                                       | (51) G01N 11/00                                                                     |
| G01N 29/24                                                                      | (47) 07.07.2021                                                                                                                                                         | G01N 11/14                                                                          |
| G01N 29/44                                                                      | (87) JP2016066079                                                                                                                                                       | (11) EP3193157                                                                      |
| (11) EP3531123                                                                  | 07.12.2017                                                                                                                                                              | (21) EP17150208.1                                                                   |
| (21) EP19158142.0                                                               | (22) 31.05.2016                                                                                                                                                         | (47) 14.07.2021                                                                     |
| (47) 07.07.2021                                                                 | (54) MECHANICAL APPARATUS, WORK VEHICLE, SYSTEM FOR ESTIMATING DETERIORATION STATE OF MECHANICAL PART, AND METHOD FOR ESTIMATING DETERIORATION STATE OF MECHANICAL PART | (22) 03.01.2017                                                                     |
| (22) 19.02.2019                                                                 | (73) Komatsu Ltd.                                                                                                                                                       | (54) DEVICE FOR MEASURING VISCOSITY UNDER INERT ATMOSPHERE, ANALYSIS METHOD AND USE |
| (54) LASER ULTRASOUND SCANNING FOR VISUALIZING DAMAGE OR IRREGULARITIES         | (72) CHIKUGO, Hiroyuki                                                                                                                                                  | (73) SPCM SA                                                                        |
| (73) The Boeing Company                                                         | HORI, Shuuji                                                                                                                                                            | (72) GIL, Ludwig                                                                    |
| (72) IHN, Jeong-Beom                                                            | ONO, Mutsumi                                                                                                                                                            | FAVERO, Cédric                                                                      |
| GEORGESON, Gary E.                                                              | SAITOU, Kiyotaka                                                                                                                                                        | FRUCHART, Jean-Sébastien                                                            |
| MOTZER, William Paul                                                            | SANO, Shinya                                                                                                                                                            | (31) 1650383                                                                        |
| (31) 201815904114                                                               | UNNO, Takeaki                                                                                                                                                           | (32) 18.01.2016                                                                     |
| (32) 23.02.2018                                                                 | (51) G01M 99/00                                                                                                                                                         | (33) France                                                                         |
| (33) United States of America                                                   | F16K 37/00                                                                                                                                                              | (51) G01N 15/00                                                                     |
| (51) G01M 11/02                                                                 | G05B 19/44                                                                                                                                                              | G01N 15/02                                                                          |
| G02C 7/02                                                                       | G05B 23/02                                                                                                                                                              | G01N 15/06                                                                          |
| G02C 7/06                                                                       | (11) EP3191904                                                                                                                                                          | G01N 15/14                                                                          |
| (11) EP2502045                                                                  | (21) EP15762832.2                                                                                                                                                       | G01N 21/49                                                                          |
| (21) EP10776757.6                                                               | (47) 14.07.2021                                                                                                                                                         | G01N 21/53                                                                          |
| (47) 07.07.2021                                                                 | (87) US2015046146                                                                                                                                                       | G01S 7/499                                                                          |
| (87) EP2010067778                                                               | 17.03.2016                                                                                                                                                              | G01S 17/95                                                                          |
| 26.05.2011                                                                      | (22) 20.08.2015                                                                                                                                                         | H01S 5/0683                                                                         |
| (22) 18.11.2010                                                                 | (54) METHOD FOR DETERMINING AMPLITUDE OF STICK-SLIP ON A VALVE ASSEMBLY AND IMPLEMENTATION THEREOF                                                                      | G01S 7/491                                                                          |
| (54) METHOD FOR DETERMINING BINOCULAR PERFORMANCE OF A PAIR OF SPECTACLE LENSES | (73) Dresser, LLC                                                                                                                                                       | G01S 7/4912                                                                         |
| (73) Essilor International                                                      | (72) SCHOONOVER, Larry, Gene                                                                                                                                            | (11) EP3130909                                                                      |
| (72) MOUSSET, Soazic                                                            | (31) 201462049287 P                                                                                                                                                     | (21) EP15775982.0                                                                   |
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| (73) ZF Friedrichshafen AG                                                      | SINGER, Marco                                                                                                                                                           | (11) EP3171160                                                                      |
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| (72) CHAMPSEIX, Henri                  | United States of America                  | TRANSPARENT SAMPLE                        |
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| (54) UV DIODE LASER EXCITATION IN      | (73) Oxford University Innovation Limited | ANALYSIS OF A SAMPLE FLUID                |
| FLOW CYTOMETRY                         | (72) SMITH, Jason Michael                 | (73) Dnaphone S.r.l.                      |
| (73) XY, LLC                           | VALLANCE, Claire                          | (72) CANDIANI, Alessandro                 |
| (72) SHARPE, Johnathan Charles         | (31) 201207881                            | TONELLI, Alessandro                       |
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| AND FLOW CYTOMETER USING SAME          | WILLIAMS, Paul, C.                        | (73) Siemens Healthcare Diagnostics Inc.  |
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| (72) TAKEDA Kazuo                      | 856885                                    | Zercher, Amy                              |
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| PLANAT-CHRETIEN, Anne                                                                                                              | (54) METHOD, USES OF AND DEVICE<br>FOR SURFACE ENHANCED RAMAN<br>SPECTROSCOPY                  | SKOU, Søren                                                                               |
| BERGER, Michel                                                                                                                     | (73) ETH Zurich                                                                                | (31) 18290051                                                                             |
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| (73) NEC Corporation                                                                                                               | (22) 16.09.2014                                                                                | (73) Pepic NV                                                                             |
| (72) KANEKO, Eiji                                                                                                                  | (54) SUBSTRATE FOR SURFACE-<br>ENHANCED RAMAN SPECTROSCOPY<br>AND METHOD FOR PRODUCING<br>SAME | (72) VERBIEST, Joeri                                                                      |
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| (54) METHOD OF STIMULATED EMISSION<br>DEPLETION MICROSCOPY AT HIGH<br>SPATIAL RESOLUTION                                           | 08.03.2010                                                                                     | (47) 07.07.2021                                                                           |
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| (72) LANZANO, Luca                                                                                                                 | Korea (Republic)                                                                               | 30.11.2017                                                                                |
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| DIASPRO, Alberto                                                                                                                   | (51) G01N 23/201                                                                               | (73) Rocsole Ltd.                                                                         |
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| (33) United States of America                                                                                   | (32) 06.02.2007                                                                                                        | (72) NORMAN, Mark L.                                     |
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| CHRZAN, Rigobert                                                                                                |                                                                                                                        | (47) 07.07.2021                                          |
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| HENGSTENBERG, Andreas                                                                                           | HUBERT, Elisa                                                                                                          | (73) Quest Diagnostics Investments LLC                   |
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| (72) AUBRY, Vincent                                                                                             | (73) Döbelin, Werner                                                                                                   | (54) METHOD FOR OBSERVING DYNAMICS OF SWEAT GLANDS       |
| OUGAZZADEN, Abdallah                                                                                            | (72) Döbelin, Werner                                                                                                   | (73) Mandom Corporation                                  |
| SALVESTINI, Jean-Paul                                                                                           | (31) 11112017                                                                                                          | Osaka University                                         |
| VOSS, Paul                                                                                                      | (32) 06.09.2017                                                                                                        | (72) NAKASHIMA Kie                                       |
| HALFAYA, Yacine                                                                                                 | (33) Switzerland                                                                                                       | KURATA Ryuichiro                                         |
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| (21) EP16161195.9                                                                                               | (21) EP16168268.7                                                                                                      | TANEMURA Atsushi                                         |
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| RICHARDSON, Keith George                                                                                        | Kim, Hyunkyung                                                                                                         | (51) G01N 33/487                                         |
| LANGRIDGE, David J.                                                                                             | Park, Daeun                                                                                                            | G01N 33/49                                               |
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| C12Q 1/68                             | (21) EP16858484.5                        | OF BLOOD-RELATED DISEASES                    |
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| 22.03.2018                            | (54) DECODING METHODS FOR                | POLLARD, Jonas                               |
| (22) 20.04.2017                       | MULTIPLEXING ASSAYS AND                  | (31) 201662338673 P                          |
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| MOLECULE, SENSOR FOR SIGA             | (73) The University of North Carolina at | (51) G01N 33/569                             |
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| (73) NEC Solution Innovators, Ltd.    | HENLEY, William Hampton                  | (47) 14.07.2021                              |
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| KANEKO, Naoto                         | G01N 21/552                              | BACTERIAL AND VIRAL INFECTION                |
| WAGA, Iwao                            | (11) EP3180619                           | AND METHODS OF USE THEREOF                   |
| KUWAHARA, Masayasu                    | (21) EP15831667.9                        | (73) Memed Diagnostics, Ltd.                 |
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| (47) 07.07.2021                       | (73) Zoetis Services LLC                 | C12Q 1/689                                   |
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| (51) G01N 33/53                       | (21) EP18180720.7                        | SHAN, Jinyu                                  |
| G01N 33/533                           | (47) 14.07.2021                          | TEULIERES, Louis Charles                     |
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| C12Q 1/68                             | (73) Fundamental Solutions Corporation   | (51) G01N 33/569                             |
| (11) EP3391048                        | (72) ZENG, Lingchun                      | G16B 20/00                                   |
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| (47) 07.07.2021                       | VEDAMOORTHY, Srikanth                    | (21) EP16794257.2                            |
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| (73) Case Western Reserve University  | (33) United States of America            | INDIRECTLY RECOGNIZED HLA-                   |
| (72) WEINBERG, Aaron                  | (51) G01N 33/557                         | DERIVED PEPTIDES                             |
| GHOSH, Santosh                        | G01N 33/569                              | (73) PIRCHE AG                               |
| GURKAN, Umut A.                       | G01N 33/573                              | UMC Utrecht Holding B.V.                     |
| (31) 201562267618 P                   | G01N 33/72                               | (72) SCHLIEHE-DIECKES, Ralf                  |
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| (47) 07.07.2021                   | MUTATIONS AND WILD TYPE BRAF             | AND TUBE SLOT LOCALIZATION IN A          |
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| (NMT)1, NMT2 AND METHIONINE       | SUGIHARA, Yutaka                         | WU, Wen                                  |
| AMINOPEPTIDASE 2                  | (31) 1651685                             | DUMONT, Guillaume                        |
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| BROOKS, Christopher               | (22) 16.04.2018                          | H02J 9/00                                |
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| C12Q 1/6883                       | ITO, Masami                              | (47) 14.07.2021                          |
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| (54) BIOMARKER COMPOSITION FOR    | (51) G01N 33/68                          | (72) KIM, Yu Su                          |
| DIAGNOSIS OF SKIN BARRIER         | H01J 49/26                               | KIM, Ji Young                            |
| FUNCTION                          | (11) EP3557605                           | PARK, Se Ho                              |
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| (72) SON, Eui Dong                | (47) 14.07.2021                          | PARK, Young Joon                         |
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| KIM, Hyoung June                  | Incorporated                             | (51) G01P 15/08                          |
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| CHO, Eun-Gyung                    | REITZ, Richard                           | (11) EP3660519                           |
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| (51) G01N 33/68                   | G06T 7/73                                | (73) Yokogawa Electric Corporation       |
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| (54) ACCELEROMETER                          | VOLTAGE SENSING DEVICES                   | LUSZICK, Christian-Alexander       |
| (73) Atlantic Inertial Systems Limited      | (73) General Electric Company             | (31) 17183784                      |
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| (54) VERTICAL SUPERCONDUCTIVE               | (21) EP15844535.3                         | DISCHARGING A RECHARGEABLE         |
| MAGNETIC SPRING OSCILLATOR                  | (47) 07.07.2021                           | BATTERY                            |
| WITH ADJUSTABLE INHERENT                    | (87) JP2015004890                         | (73) Toyota Motor Europe           |
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| (73) Huazhong University of Science and     | (22) 25.09.2015                           | KATOH, Yuki                        |
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| (72) LIU, Xiangdong                         | SIGNAL DETECTION CIRCUIT AND              | H02J 3/00                          |
| LUO, Jun                                    | CURRENT SENSOR                            | H02J 3/46                          |
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| (33) China                                  | NISHIMURA, Yoshiyasu                      | (47) 14.07.2021                    |
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| (47) 14.07.2021                             | (33) Japan                                | EXTERNAL NETWORK                   |
| (22) 03.12.2018                             | (51) G01R 19/165                          | (73) Hitachi, Ltd.                 |
| (54) SINGLE AXIS INERTIAL SENSOR WITH       | G01R 19/25                                | (72) NERADHALA, Nagaraj            |
| SUPPRESSED PARASITIC MODES                  | H02J 13/00                                | NAGENDRAN, Mayank                  |
| (73) NXP USA, Inc.                          | (11) EP3341743                            | (31) 201941009035                  |
| (72) TANG, Jun                              | (21) EP16839930.1                         | (32) 08.03.2019                    |
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| (51) G01R 13/02                             | AUTOMATIC HIGH RESISTANCE                 | H05K 1/18                          |
| G01R 19/04                                  | GROUND PULSE ACTIVATION AND               | H02M 1/44                          |
| G06T 11/20                                  | DETECTION                                 | (11) EP3641509                     |
| (11) EP2706363                              | (73) Eaton Intelligent Power Limited      | (21) EP19201203.7                  |
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| (22) 16.08.2013                             | DIMINO, Steven Andrew                     | (54) ELECTRONIC CARD COMPRISING A  |
| (54) Line for marking common points in time | HRNCIR, Daniel Edward                     | RECTIFIER BRIDGE                   |
| (73) Rohde & Schwarz GmbH & Co. KG          | MORT, Deborah Kaltwasser                  | (73) Sagemcom Energy & Telecom SAS |
| (72) Lang, Florian                          | BURKLE, Alec Dane                         | (72) DE LA CRUZ, Fabien            |
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| (22) 30.01.2020                                                                                                   | Gramsch, Christoph                                                                                         | MANAGEMENT SYSTEM AND                                                                                             |
| (54) MEASUREMENT OF THE DURATION OF A PULSE                                                                       | Berth, Torsten                                                                                             | STORAGE MEDIUM                                                                                                    |
| (73) STMICROELECTRONICS SA                                                                                        | (31) 102011117491                                                                                          | (73) Contemporary Amperex Technology Co., Limited                                                                 |
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| (72) LECAT-MATHIEU DE BOISSAC, Capucine                                                                           | (33) Germany                                                                                               | LI, Shichao                                                                                                       |
| ABOUZEID, Fady                                                                                                    | (51) G01R 31/28                                                                                            | RUAN, Jian                                                                                                        |
| GASIOT, Gilles                                                                                                    | G01R 31/3181                                                                                               | TANG, Shenzhen                                                                                                    |
| ROCHE, Philippe                                                                                                   | G01R 31/26                                                                                                 | LU, Yanhua                                                                                                        |
| MALHERBE, Victor                                                                                                  | (11) EP3652550                                                                                             | ZHANG, Wei                                                                                                        |
| (31) 1900935                                                                                                      | (21) EP18831753.1                                                                                          | (31) 201910441469                                                                                                 |
| (32) 31.01.2019                                                                                                   | (47) 07.07.2021                                                                                            | (32) 24.05.2019                                                                                                   |
| (33) France                                                                                                       | (87) IL2018050480                                                                                          | (33) China                                                                                                        |
| (51) G01R 29/08                                                                                                   | 17.01.2019                                                                                                 | (51) G01R 31/42                                                                                                   |
| G01R 31/00                                                                                                        | (22) 01.05.2018                                                                                            | H03M 1/12                                                                                                         |
| G06F 11/07                                                                                                        | (54) PORTABLE DEVICE FOR SOFT ERRORS TESTING                                                               | H03M 1/66                                                                                                         |
| (11) EP3724762                                                                                                    | (73) Hanan, Deny                                                                                           | (11) EP3384301                                                                                                    |
| (21) EP18833099.7                                                                                                 | (72) Hanan, Deny                                                                                           | (21) EP16871185.1                                                                                                 |
| (47) 07.07.2021                                                                                                   | (31) 201762530308 P                                                                                        | (47) 14.07.2021                                                                                                   |
| (87) FR2018053262                                                                                                 | 201815876157                                                                                               | (87) US2016032723                                                                                                 |
| 20.06.2019                                                                                                        | (32) 10.07.2017                                                                                            | 08.06.2017                                                                                                        |
| (22) 13.12.2018                                                                                                   | 21.01.2018                                                                                                 | (22) 16.05.2016                                                                                                   |
| (54) METHOD FOR PROCESSING A SIGNAL COMPRISING DETECTION OF INTERFERENCE CAUSED BY A LIGHTNING STRIKE             | (33) United States of America                                                                              | (54) RIPPLE MONITORING                                                                                            |
| (73) SAFRAN ELECTRONICS & DEFENSE                                                                                 | United States of America                                                                                   | (73) Linear Technology LLC                                                                                        |
| (72) CONQ, Mathieu                                                                                                | (51) G01R 31/28                                                                                            | (72) ENGL, Bernhard Helmut                                                                                        |
| GENESTE, Nicolas                                                                                                  | G06K 9/00                                                                                                  | CHIAACCHIA, Robert                                                                                                |
| FERNANDES GOMES, Manuel                                                                                           | (11) EP3188078                                                                                             | DOBKIN, Robert C.                                                                                                 |
| (31) 1762138                                                                                                      | (21) EP16207364.7                                                                                          | (31) 201562261032 P                                                                                               |
| (32) 14.12.2017                                                                                                   | (47) 14.07.2021                                                                                            | 201615153222                                                                                                      |
| (33) France                                                                                                       | (22) 29.12.2016                                                                                            | (32) 30.11.2015                                                                                                   |
| (51) G01R 29/10                                                                                                   | (54) METHOD AND DEVICE FOR FINGERPRINT IDENTIFICATION                                                      | 12.05.2016                                                                                                        |
| H01Q 19/13                                                                                                        | (73) Xiaomi Inc.                                                                                           | (33) United States of America                                                                                     |
| H01Q 19/19                                                                                                        | (72) SUN, Changyu                                                                                          | United States of America                                                                                          |
| (11) EP2990814                                                                                                    | LI, Zhijie                                                                                                 | (51) G01R 33/00                                                                                                   |
| (21) EP15181764.0                                                                                                 | SUN, Wei                                                                                                   | G01R 33/07                                                                                                        |
| (47) 14.07.2021                                                                                                   | (31) 201511009131                                                                                          | (11) EP3123188                                                                                                    |
| (22) 20.08.2015                                                                                                   | (32) 29.12.2015                                                                                            | (21) EP15719938.1                                                                                                 |
| (54) METHOD AND DEVICE FOR MEASURING INTERMODULATION PRODUCTS BY REFLECTION OF ELECTROMAGNETIC WAVES ON AN OBJECT | (33) China                                                                                                 | (47) 14.07.2021                                                                                                   |
| (73) Centre National d'Etudes Spatiales (C.N.E.S.)                                                                | (51) G01R 31/327                                                                                           | (87) US2015026071                                                                                                 |
| (72) SOMBRIN, Jacques                                                                                             | H02J 7/00                                                                                                  | 22.10.2015                                                                                                        |
| ALBERT, Isabelle                                                                                                  | H02J 7/34                                                                                                  | (22) 16.04.2015                                                                                                   |
| SOUBERCAZE-PUN, Geoffroy                                                                                          | (11) EP3503343                                                                                             | (54) CIRCUITS AND METHODS FOR SELF-CALIBRATING OR SELF-TESTING A MAGNETIC FIELD SENSOR USING PHASE DISCRIMINATION |
| CAPET, Nicolas                                                                                                    | (21) EP18210048.7                                                                                          | (73) Allegro MicroSystems, LLC                                                                                    |
| (31) 1457996                                                                                                      | (47) 07.07.2021                                                                                            | (72) CESARETTI, Juan Manuel                                                                                       |
| (32) 26.08.2014                                                                                                   | (22) 04.12.2018                                                                                            | ALPAGO, Octavio H.                                                                                                |
| (33) France                                                                                                       | (54) ELECTRICAL SYSTEM AND METHOD FOR DIAGNOSING THE FUNCTIONALITY OF POWER RELAYS IN AN ELECTRICAL SYSTEM | MILESI, Alejandro G.                                                                                              |
| (51) G01R 31/14                                                                                                   | (73) VOLKSWAGEN AKTIENGESELLSCHAFT                                                                         | MARTIN PIRCHIO, Franco Noel                                                                                       |
| G01R 31/50                                                                                                        | (72) Müller, Jens Uwe                                                                                      | ROMERO, Hernan D.                                                                                                 |
| G01R 31/58                                                                                                        | Dang Hung, Lan                                                                                             | UBERTI, Bruno Luis                                                                                                |
| (11) EP2587271                                                                                                    | Stolz, Markus                                                                                              | (31) 201414255166                                                                                                 |
| (21) EP12005404.4                                                                                                 | Gerth, Dr. Hendrik                                                                                         | (32) 17.04.2014                                                                                                   |
| (47) 07.07.2021                                                                                                   | (31) 102017223229                                                                                          | (33) United States of America                                                                                     |
| (22) 25.07.2012                                                                                                   | (32) 19.12.2017                                                                                            | (51) G01R 33/36                                                                                                   |
| (54) Testing apparatus for cables for voltage testing by means of a VLF voltage                                   | (33) Germany                                                                                               | (11) EP3732494                                                                                                    |
| (73) Megger Germany GmbH                                                                                          | (51) G01R 31/382                                                                                           | (21) EP19798317.4                                                                                                 |
| (72) Scheuschner, Sven                                                                                            | G01R 31/388                                                                                                | (47) 07.07.2021                                                                                                   |
| Stechemesser, Nico                                                                                                | G01R 31/392                                                                                                | (87) EP2019080730                                                                                                 |
| Bechler, Dirk                                                                                                     | (11) EP3742181                                                                                             | 14.05.2020                                                                                                        |
|                                                                                                                   | (21) EP20171922.6                                                                                          | (22) 08.11.2019                                                                                                   |
|                                                                                                                   | (47) 07.07.2021                                                                                            | (54) A RADIO FREQUENCY POWER AMPLIFIER AND METHOD OF ASSEMBLY THEREOF                                             |
|                                                                                                                   | (22) 28.04.2020                                                                                            | (73) Koninklijke Philips N.V.                                                                                     |
|                                                                                                                   | (54) METHOD AND APPARATUS FOR CORRECTING SOC, BATTERY                                                      | (72) ZENG, Keqiu                                                                                                  |
|                                                                                                                   |                                                                                                            | ZHOU, Cong                                                                                                        |

|                                                |                                     |                                     |
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| DING, Yuanxu                                   | (22) 11.11.2016                     | RAMACHANDRAN, Mahesh                |
| ZHANG, Jungyang                                | (54) METHOD AND SYSTEM FOR          | TYAGI, Abhishek                     |
| MA, Jun                                        | DYNAMIC REASSIGNMENT OF AN          | KNOBLAUCH, Daniel                   |
| (31) PCT/CN2018/114862                         | IDENTIFICATION CODE IN A LIGHT-     | CHARI, Murali Ramaswamy             |
| 18212228                                       | BASED POSITIONING SYSTEM            | (31) 201213523634                   |
| (32) 09.11.2018                                | (73) ABL IP Holding LLC             | (32) 14.06.2012                     |
| 13.12.2018                                     | (72) LYDECKER, Stephen H.           | (33) United States of America       |
| (33) World Intellectual Property Office (WIPO) | KLITENIK, Konstantin                | (51) G01S 3/82                      |
| European Patent Office (EPO)                   | RYAN, Daniel                        | G01S 5/06                           |
| (51) G01R 33/36                                | MALANDRAKIS, Emanuel Paul           | G01S 5/12                           |
| (11) EP3611527                                 | ABOU-RIZK, Mitri J.                 | H01Q 3/26                           |
| (21) EP18189310.8                              | (31) 201514944774                   | H04W 4/02                           |
| (47) 14.07.2021                                | (32) 18.11.2015                     | (11) EP3360201                      |
| (22) 16.08.2018                                | (33) United States of America       | (21) EP16854515.0                   |
| (54) LOCAL COIL AND SYSTEM FOR                 | (51) G01S 3/14                      | (47) 07.07.2021                     |
| WIRELESS ENERGY TRANSMISSION                   | G05B 19/418                         | (87) US2016056173                   |
| (73) Siemens Healthcare GmbH                   | G06Q 10/08                          | 13.04.2017                          |
| (72) Fackelmeier, Andreas                      | G01S 5/02                           | (22) 07.10.2016                     |
| (51) G01R 33/36                                | (11) EP3452844                      | (54) ANGLE OF ARRIVAL POSITIONING   |
| G01R 33/46                                     | (21) EP17721454.1                   | SYSTEM FOR TRACKING OBJECTS         |
| G01R 33/48                                     | (47) 14.07.2021                     | (73) PoLTE Corporation              |
| G01R 33/561                                    | (87) GB2017051210                   | (72) PREVATT, Truman                |
| (11) EP3336569                                 | 09.11.2017                          | (31) 201562239195 P                 |
| (21) EP17204831.6                              | (22) 28.04.2017                     | 201662290087 P                      |
| (47) 14.07.2021                                | (54) OBJECT DETECTION               | (32) 08.10.2015                     |
| (22) 01.12.2017                                | (73) Ubisense Limited               | 02.02.2016                          |
| (54) METHOD FOR MAGNETIC                       | (72) STEGGLES, Peter Joseph         | (33) United States of America       |
| RESONANCE EXAMINATION OF AN                    | (31) 201607899                      | United States of America            |
| OBJECT TO BE MEASURED AND HIGH                 | (32) 05.05.2016                     | (51) G01S 5/02                      |
| FREQUENCY UNIT OF A MAGNETIC                   | (33) United Kingdom                 | H04W 4/02                           |
| RESONANCE DEVICE                               | (51) G01S 3/46                      | (11) EP3325994                      |
| (73) Albert-Ludwigs-Universität Freiburg       | G01S 3/48                           | (21) EP16742431.6                   |
| (72) ÖZEN, Ali Caglar                          | H01Q 1/24                           | (47) 07.07.2021                     |
| BOCK, Michael                                  | H01Q 1/27                           | (87) SE2016050718                   |
| (31) 102016014340                              | H01Q 21/28                          | 26.01.2017                          |
| (32) 02.12.2016                                | H01Q 5/25                           | (22) 14.07.2016                     |
| (33) Germany                                   | H01Q 5/378                          | (54) SYSTEM, DEVICE, NODE, AND      |
| (51) G01R 33/56                                | (11) EP3512036                      | METHOD FOR TRACKING A DEVICE        |
| G01R 33/563                                    | (21) EP19151829.9                   | (73) NiDa Tech Sweden AB            |
| (11) EP2756324                                 | (47) 14.07.2021                     | (72) DACEFJORD, Håkan               |
| (21) EP12777958.5                              | (22) 15.01.2019                     | TAWS, Warwick                       |
| (47) 14.07.2021                                | (54) ANTENNA FOR DETECTING POSITION | (31) 1551033                        |
| (87) US2012055458                              | OF EXTERNAL ELECTRONIC DEVICE       | (32) 21.07.2015                     |
| 02.05.2013                                     | AND WEARABLE ELECTRONIC             | (33) Sweden                         |
| (22) 14.09.2012                                | DEVICE INCLUDING THE SAME           | (51) G01S 5/10                      |
| (54) MRI TRACTOGRAPHY METHOD FOR               | (73) Samsung Electronics Co., Ltd.  | G01S 13/87                          |
| DETERMINING TRANSIT TIME FOR                   | (72) Ahn, Jungho                    | G08B 13/14                          |
| NERVE OR MUSCLE FIBERS                         | Kwon, Kiyoung                       | G08B 21/02                          |
| (73) The United States of America,             | Namgoong, Boram                     | G08B 21/24                          |
| as represented by the Secretary,               | (31) 20180004989                    | G01S 5/02                           |
| Department of Health and Human                 | (32) 15.01.2018                     | (11) EP3543730                      |
| Services                                       | (33) Korea (Republic)               | (21) EP19168179.0                   |
| (72) BASSER, Peter, J.                         | (51) G01S 3/786                     | (47) 14.07.2021                     |
| (31) 201161535851 P                            | G06T 7/254                          | (22) 14.05.2014                     |
| (32) 16.09.2011                                | (11) EP2862146                      | (54) METHOD FOR LOCATING A WIRELESS |
| (33) United States of America                  | (21) EP13730774.0                   | TAGS                                |
| (51) G01S 1/70                                 | (47) 14.07.2021                     | (73) SES-imagotag GmbH              |
| G01S 5/16                                      | (87) US2013045012                   | (72) Rößl, Andreas                  |
| G06K 9/46                                      | 19.12.2013                          | (51) G01S 5/10                      |
| G08C 15/06                                     | (22) 10.06.2013                     | G08B 21/02                          |
| H04B 10/116                                    | (54) ADAPTIVE SWITCHING BETWEEN A   | G08B 21/24                          |
| H05B 45/10                                     | VISION AIDED INTERTIAL CAMERA       | G01S 5/02                           |
| H04M 1/725                                     | POSE ESTIMATION AND A VISION        | (11) EP3540455                      |
| (11) EP3378013                                 | BASED ONLY CAMERA POSE              | (21) EP19168167.5                   |
| (21) EP16866892.9                              | ESTIMATION.                         | (47) 14.07.2021                     |
| (47) 07.07.2021                                | (73) Qualcomm Incorporated          | (22) 14.05.2014                     |
| (87) US2016061553                              | (72) RAMANANDAN, Arvind             | (54) METHOD FOR LOCATING A WIRELESS |
| 26.05.2017                                     | BRUNNER, Christopher                | TAGS                                |

|                                       |                                      |                                         |
|---------------------------------------|--------------------------------------|-----------------------------------------|
| (73) SES-imagotag GmbH                | INCLUDING SUCH A DETECTION           | (54) LASER TRACKER WITH TWO             |
| (72) Rößl, Andreas                    | DEVICE                               | MEASURING FUNCTIONALITIES               |
| (51) G01S 7/02                        | (73) Airbus Defence and Space SAS    | (73) Leica Geosystems AG                |
| H01Q 1/32                             | (72) PICARD, Mathieu                 | (72) LÜTHI, Thomas                      |
| H01Q 1/42                             | ELFASSI, Adrien                      | MAKSIMOVIC, Veroljub                    |
| H01Q 1/52                             | (31) 1653440                         | (51) G01S 7/487                         |
| H01Q 17/00                            | (32) 19.04.2016                      | G01S 17/10                              |
| G01S 13/931                           | (33) France                          | (11) EP3088915                          |
| (11) EP3330733                        | (51) G01S 7/40                       | (21) EP15001259.9                       |
| (21) EP17202549.6                     | G01S 13/50                           | (47) 14.07.2021                         |
| (47) 14.07.2021                       | G01S 13/931                          | (22) 29.04.2015                         |
| (22) 20.11.2017                       | (11) EP3674746                       | (54) A METHOD FOR THE DETERMINATION     |
| (54) RADAR SENSOR FOR A VEHICLE AND   | (21) EP19209592.5                    | OF A PLURALITY OF DISTINCT ECHO         |
| METHOD FOR ASSEMBLING A RADAR         | (47) 07.07.2021                      | PULSES IN ORDER TO PROVIDE              |
| SENSOR                                | (22) 15.11.2019                      | DISTANCE MEASUREMENTS BY AN             |
| (73) Valeo Schalter und Sensoren GmbH | (54) METHODS AND COMPUTER DEVICES    | ACTIVE 3D SENSOR                        |
| (72) Sickinger, Frank                 | FOR DETERMINING ANGULAR              | (73) HENSOLDT Sensors GmbH              |
| Seybold, Marco                        | OFFSET OF RADAR SYSTEM               | (72) Krämper, Patrick                   |
| (31) 102016123439                     | (73) Yandex Self Driving Group LLC   | Münsterer, Thomas                       |
| (32) 05.12.2016                       | (72) SUMIN, Anton Aleksandrovich     | (51) G01S 7/497                         |
| (33) Germany                          | (31) 2018147498                      | B60R 25/20                              |
| (51) G01S 7/03                        | (32) 29.12.2018                      | G01S 7/486                              |
| G01S 13/34                            | (33) Russian Federation              | G01S 17/894                             |
| H01Q 21/06                            | (51) G01S 7/481                      | (11) EP2946226                          |
| G01S 13/93                            | G01S 7/484                           | (21) EP14700075.6                       |
| (11) EP2756329                        | G01S 7/487                           | (47) 07.07.2021                         |
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| (47) 07.07.2021                       | G01S 17/58                           | 24.07.2014                              |
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| 14.03.2013                            | G01S 17/10                           | (54) UNIVERSAL SENSOR ASSEMBLY FOR      |
| (22) 04.09.2012                       | (11) EP3605140                       | DETECTING OPERATOR GESTURES             |
| (54) IMAGING RADAR SENSOR WITH        | (21) EP17905724.5                    | IN VEHICLES                             |
| NARROW ANTENNA LOBE AND WIDE          | (47) 07.07.2021                      | (73) Huf Hülsbeck & Fürst GmbH & Co. KG |
| ANGLE-DETECTION RANGE                 | (87) JP2017015135                    | (72) SCHINDLER, Mirko                   |
| (73) Astyx GmbH                       | 18.10.2018                           | (31) 102013100522                       |
| (72) KÖRBER, Richard                  | (22) 13.04.2017                      | (32) 18.01.2013                         |
| GIERE, Andre                          | (54) LASER RADAR DEVICE              | (33) Germany                            |
| (31) 102011113018                     | (73) Mitsubishi Electric Corporation | (51) G01S 7/497                         |
| (32) 09.09.2011                       | (72) HARAGUCHI, Eisuke               | G01S 17/42                              |
| (33) Germany                          | ANDO, Toshiyuki                      | (11) EP3404442                          |
| (51) G01S 7/28                        | ONO, Hitomi                          | (21) EP18173074.8                       |
| G01S 7/35                             | (51) G01S 7/481                      | (47) 07.07.2021                         |
| G01S 7/40                             | G01S 17/42                           | (22) 18.05.2018                         |
| G01S 13/02                            | G01S 17/48                           | (54) SIMULATION DEVICE FOR              |
| G01S 13/34                            | G01S 17/04                           | A ROTATING LIDAR LIGHT                  |
| G01S 13/42                            | (11) EP3438691                       | MEASUREMENT SYSTEM                      |
| H01Q 3/26                             | (21) EP18184422.6                    | (73) KONRAD GmbH                        |
| H01Q 3/34                             | (47) 14.07.2021                      | (72) KONRAD, Michael                    |
| H01Q 21/22                            | (22) 19.07.2018                      | (31) 102017110794                       |
| H01Q 23/00                            | (54) OPTOELECTRONIC SENSOR AND       | (32) 18.05.2017                         |
| (11) EP3521852                        | METHOD FOR DETECTING OBJECTS         | (33) Germany                            |
| (21) EP18154523.7                     | IN A SURVEILLANCE AREA               | (51) G01S 11/12                         |
| (47) 14.07.2021                       | (73) SICK AG                         | G08G 1/16                               |
| (22) 31.01.2018                       | (72) Gimpel, Hartmut                 | G01S 17/93                              |
| (54) RADAR BEAMFORMING METHOD         | Tschuch, Sebastian                   | (11) EP3155446                          |
| (73) Sivers Wireless AB               | (31) 102017117694                    | (21) EP15729410.9                       |
| (72) Berg, Håkan                      | (32) 04.08.2017                      | (47) 07.07.2021                         |
| (51) G01S 7/288                       | (33) Germany                         | (87) EP2015062890                       |
| G01S 13/78                            | (51) G01S 7/481                      | 17.12.2015                              |
| (11) EP3446149                        | G01S 17/42                           | (22) 10.06.2015                         |
| (21) EP17717201.2                     | G01S 17/66                           | (54) METHOD AND SYSTEM FOR              |
| (47) 07.07.2021                       | G01S 17/10                           | ESTIMATING A PARAMETER IN A             |
| (87) EP2017059246                     | G01S 17/32                           | MOTOR VEHICLE, AND MOTOR                |
| 26.10.2017                            | G01S 17/87                           | VEHICLE PROVIDED WITH SUCH A            |
| (22) 19.04.2017                       | (11) EP3220163                       | SYSTEM                                  |
| (54) METHOD AND DEVICE FOR            | (21) EP16160434.3                    | (73) Valeo Schalter und Sensoren GmbH   |
| DETECTING MODE S MESSAGES             | (47) 07.07.2021                      | (72) VEJARANO, Camillo                  |
| EMITTED BY AIRCRAFT, SATELLITE        | (22) 15.03.2016                      | CHANUSSOT, Lowik                        |

|                                         |                                   |                                             |
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| (32) 12.06.2014                         | 25.11.2010                        | (21) EP18746155.3                           |
| (33) France                             | (22) 21.05.2010                   | (47) 14.07.2021                             |
| (51) G01S 13/00                         | (54) COMPACT MOBILE CARGO         | (87) EP2018070088                           |
| H04B 1/525                              | SCANNING SYSTEM                   | 07.03.2019                                  |
| (11) EP3499731                          | (73) Rapiscan Systems, Inc.       | (22) 25.07.2018                             |
| (21) EP17208228.1                       | (72) MORTON, Edward, James        | (54) SEMICONDUCTOR                          |
| (47) 14.07.2021                         | BALDWIN, Frank                    | PHOTOMULTIPLIER WITH IMPROVED               |
| (22) 18.12.2017                         | KOTOWSKI, Andreas, F.             | OPERATING VOLTAGE RANGE                     |
| (54) INTERFERENCE CANCELLATION OF       | (31) 180471 P                     | (73) SENSL Technologies Ltd.                |
| EXPECTED INTERFERENCE SIGNAL            | (32) 22.05.2009                   | (72) DALY, Paul Malachy                     |
| (73) NXP USA, Inc.                      | (33) United States of America     | JACKSON, John Carlton                       |
| (72) Guarin Aristizabal, Gustavo Adolfo | (51) G01T 1/16                    | (31) 201715689135                           |
| Reuter, Ralf                            | (11) EP3377919                    | (32) 29.08.2017                             |
| Brett, Maik                             | (21) EP16794558.3                 | (33) United States of America               |
| (51) G01S 17/74                         | (47) 14.07.2021                   | (51) G01T 1/29                              |
| G01S 17/89                              | (87) EP2016076763                 | (11) EP3647823                              |
| (11) EP3365701                          | 26.05.2017                        | (21) EP19205749.5                           |
| (21) EP16781385.6                       | (22) 07.11.2016                   | (47) 07.07.2021                             |
| (47) 14.07.2021                         | (54) SCINTILLATING NANOCOMPOSITES | (22) 28.10.2019                             |
| (87) EP2016074375                       | (73) Koninklijke Philips N.V.     | (54) IMAGING SYSTEM WITH ONE                |
| 27.04.2017                              | (72) WIATROWSKA, Aneta            | OR MORE MASK UNITS AND                      |
| (22) 11.10.2016                         | WIECZOREK, Herfried, Karl         | CORRESPONDING METHOD OF                     |
| (54) OBTAINING DATA FROM TARGETS        | RONDA, Cornelis, Reinder          | RECORDING RADIATION                         |
| USING IMAGERY AND OTHER                 | KEUR, Wilhelmus, Cornelis         | (73) H3D, Inc.                              |
| REMOTE SENSING DATA                     | NACHMAN, Malgorzata               | (72) BROWN, Steven                          |
| (73) Skansense S.L.U.                   | (31) 15195392                     | MORAN, Kevin                                |
| (72) PORCEL MAGNUSSON, Cristina         | (32) 19.11.2015                   | (31) 201816177769                           |
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| (33) European Patent Office (EPO)       | G01T 1/24                         | (51) G01T 3/00                              |
| (51) G01S 19/00                         | G01T 1/29                         | G01T 3/08                                   |
| G01S 19/02                              | (11) EP3577495                    | G21C 17/108                                 |
| (11) EP3255459                          | (21) EP17818003.0                 | G21C 17/112                                 |
| (21) EP17171084.1                       | (47) 07.07.2021                   | (11) EP3574507                              |
| (47) 07.07.2021                         | (87) US2017064641                 | (21) EP17901186.1                           |
| (22) 15.05.2017                         | 09.08.2018                        | (47) 07.07.2021                             |
| (54) POWER ADJUSTMENT FOR CODE          | (22) 05.12.2017                   | (87) US2017067478                           |
| SIGNALS                                 | (54) COINCIDENCE-ENABLING PHOTON- | 20.09.2018                                  |
| (73) The Boeing Company                 | COUNTING DETECTOR                 | (22) 20.12.2017                             |
| (72) HO, Antony                         | (73) General Electric Company     | (54) NUCLEAR REACTOR SYSTEM,                |
| CAREY, Robert A                         | (72) FU, Geng                     | TRANSMITTER DEVICE THEREFOR,                |
| (31) 201615158280                       | JIN, Yannan                       | AND ASSOCIATED METHOD OF                    |
| (32) 18.05.2016                         | EDIC, Peter Michael               | MEASURING ENVIRONMENTAL                     |
| (33) United States of America           | CHEN, Feng                        | CONDITIONS                                  |
| (51) G01S 19/03                         | (31) 201715425800                 | (73) Westinghouse Electric Company Llc      |
| G01S 19/04                              | (32) 06.02.2017                   | (72) PETROSKY, Lyman J.                     |
| G01S 19/07                              | (33) United States of America     | (31) 201715417504                           |
| G01S 19/41                              | (51) G01T 1/185                   | (32) 27.01.2017                             |
| G01S 19/43                              | G01T 7/02                         | (33) United States of America               |
| (11) EP3654066                          | (11) EP2972497                    | (51) G01V 1/00                              |
| (21) EP19208923.3                       | (21) EP14710733.8                 | G01V 1/38                                   |
| (47) 07.07.2021                         | (47) 14.07.2021                   | (11) EP2525240                              |
| (22) 13.11.2019                         | (87) US2014019291                 | (21) EP12275069.8                           |
| (54) VERTICAL ACCURACY                  | 09.10.2014                        | (47) 07.07.2021                             |
| IMPROVEMENTS FOR DYNAMIC                | (22) 28.02.2014                   | (22) 17.05.2012                             |
| REAL-TIME KINEMATIC REFERENCE           | (54) SYSTEMS AND METHODS FOR      | (54) System for measuring a time offset and |
| STATIONS                                | ASSAYING AN ELUATE FOR            | method of measuring a time offset           |
| (73) Trimble Inc.                       | TECHNETIUM AND MOLYBDENUM         | (73) Sonardyne International Ltd.           |
| (72) CASH, Michael                      | CONTENT                           | (72) Dunn, Shaun                            |
| (31) 201816193129                       | (73) Curium US LLC                | Pearce, Christopher                         |
| (32) 16.11.2018                         | (72) GRAVES, Kevin, B.            | (31) 201108222                              |
| (33) United States of America           | PETROFSKY, Bryan, S.              | (32) 17.05.2011                             |
| (51) G01T 1/16                          | VERMA, Sumit                      | (33) United Kingdom                         |
| (11) EP2433152                          | (31) 201313800248                 | (51) G01V 1/133                             |
| (21) EP10778449.8                       | (32) 13.03.2013                   | G01V 1/22                                   |
| (47) 07.07.2021                         | (33) United States of America     | H04B 14/00                                  |
|                                         | (51) G01T 1/24                    | (11) EP2435854                              |



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| (21) EP10728949.8                      | (87) EP2014050247                     | (72) WIJMANS, Frans Johan           |
| (47) 07.07.2021                        | 16.07.2015                            | (31) 2018665                        |
| (87) US2010036423                      | (22) 08.01.2014                       | (32) 07.04.2017                     |
| 02.12.2010                             | (54) INVERSION METHOD                 | (33) Netherlands                    |
| (22) 27.05.2010                        | (73) Equinor Energy AS                | (51) G01V 5/00                      |
| (54) DIGITAL AIR GUN                   | (72) WIIK, Torgeir                    | G01N 23/10                          |
| (73) Teledyne Instruments, Inc.        | DISCHLER, Eirik Øverland              | (11) EP3502675                      |
| (72) NANCE, William, Allen             | NORDSKAG, Janniche, Iren              | (21) EP17840711.0                   |
| HOBSON, Daniel, Eugene                 | NGUYEN, Anh Kiet                      | (47) 07.07.2021                     |
| (31) 217204 P                          | (51) G01V 3/10                        | (87) CN2017073207                   |
| (32) 28.05.2009                        | G01V 3/12                             | 22.02.2018                          |
| (33) United States of America          | G01V 3/16                             | (22) 10.02.2017                     |
| (51) G01V 1/28                         | H04B 5/00                             | (54) LEAD CURTAIN PROTECTIVE DEVICE |
| (11) EP2483712                         | (11) EP3725002                        | FOR DETECTING DEVICE AND RAY        |
| (21) EP10765905.4                      | (21) EP18815233.4                     | SHIELDING METHOD                    |
| (47) 07.07.2021                        | (47) 14.07.2021                       | (73) Nuctech Company Limited        |
| (87) US2010051321                      | (87) EP2018084936                     | (72) CHEN, Zhiqiang                 |
| 07.04.2011                             | 20.06.2019                            | ZHANG, Li                           |
| (22) 04.10.2010                        | (22) 14.12.2018                       | HONG, Mingzhi                       |
| (54) METHOD OF EXPLORATION FOR         | (54) DUAL DETECTOR WITH TRANSVERSE    | ZHOU, Yong                          |
| HYDROCARBONS BASED ON AVA              | COILS                                 | LIU, Yihong                         |
| ANALYSIS, COMPUTER PROGRAM             | (73) Manneschi, Alessandro            | (31) 201610685574                   |
| PRODUCT AND COMPUTER                   | (72) Manneschi, Alessandro            | (32) 18.08.2016                     |
| APPARATUS                              | (31) 1762287                          | (33) China                          |
| (73) BP Corporation North America Inc. | (32) 15.12.2017                       | (51) G01V 8/20                      |
| (72) ALBERTIN, Uwe                     | (33) France                           | (11) EP3236295                      |
| ASKIM, Ole, Joran                      | (51) G01V 3/15                        | (21) EP16165931.3                   |
| GHERASIM, Mariana                      | (11) EP2513677                        | (47) 14.07.2021                     |
| (31) 248222 P                          | (21) EP10771095.6                     | (22) 19.04.2016                     |
| (32) 02.10.2009                        | (47) 07.07.2021                       | (54) LIGHT CURTAIN                  |
| (33) United States of America          | (87) EP2010066101                     | (73) Leuze electronic GmbH + Co KG  |
| (51) G01V 1/36                         | 23.06.2011                            | (72) Feller, Bernhard               |
| G01V 3/38                              | (22) 26.10.2010                       | (51) G01V 15/00                     |
| (11) EP3105621                         | (54) HANDHELD MEASURING DEVICE        | G09F 3/02                           |
| (21) EP15702562.8                      | (73) Robert Bosch GmbH                | G09F 3/20                           |
| (47) 14.07.2021                        | (72) KRAPF, Reiner                    | G09F 7/10                           |
| (87) GB2015050203                      | BRAUN, Heiko                          | (11) EP2673762                      |
| 20.08.2015                             | MAHLER, Michael                       | (21) EP12703870.1                   |
| (22) 29.01.2015                        | WUERSCH, Christoph                    | (47) 07.07.2021                     |
| (54) METHOD OF IDENTIFYING             | KANEIDER, Wilfried                    | (87) GB2012050251                   |
| REFLECTED SIGNALS                      | (31) 102009054950                     | 16.08.2012                          |
| (73) Adrok Limited                     | (32) 18.12.2009                       | (22) 06.02.2012                     |
| (72) VAN DER DOEL, Cornelis Peter      | (33) Germany                          | (54) INDICATOR DEVICE               |
| (31) 201402544                         | (51) G01V 3/30                        | (73) Clarke, Stephen William        |
| (32) 13.02.2014                        | G01V 3/38                             | (72) Clarke, Stephen William        |
| (33) United Kingdom                    | (11) EP2850461                        | (31) 201102156                      |
| (51) G01V 1/52                         | (21) EP12880106.5                     | (32) 08.02.2011                     |
| E21B 47/00                             | (47) 07.07.2021                       | (33) United Kingdom                 |
| (11) EP3213123                         | (87) US2012044624                     | (51) G01V 99/00                     |
| (21) EP15790792.4                      | 03.01.2014                            | (11) EP2629123                      |
| (47) 07.07.2021                        | (22) 28.06.2012                       | (21) EP13156031.0                   |
| (87) US2015057830                      | (54) MEASUREMENT CALIBRATION          | (47) 07.07.2021                     |
| 06.05.2016                             | APPARATUS, METHODS, AND               | (22) 20.02.2013                     |
| (22) 28.10.2015                        | SYSTEMS                               | (54) Simulation model optimization  |
| (54) A SYSTEM AND METHOD OF            | (73) Halliburton Energy Services Inc. | (73) Schlumberger Holdings Limited  |
| DETECTING WELL INTEGRITY               | (72) WU, Hsu-Hsiang                   | (72) Fuchs, Thomas                  |
| FAILURE                                | SAN MARTIN, Luis Emilio               | Fuecker, Michael                    |
| (73) Chevron U.S.A. Inc.               | (51) G01V 5/00                        | Kauerauf, Armin                     |
| (72) HOVERSTEN, Gary Michael           | (11) EP3385759                        | Kleine, Adrian                      |
| DALEY, Thomas M.                       | (21) EP18162082.4                     | (31) 201261600921 P                 |
| KORNEEV, Valeri A.                     | (47) 14.07.2021                       | 201313769658                        |
| (31) 201462069372 P                    | (22) 15.03.2018                       | (32) 20.02.2012                     |
| (32) 28.10.2014                        | (54) MONITORING SYSTEM FOR REAL-      | 18.02.2013                          |
| (33) United States of America          | TYPE MONITORING RELEASE OF            | (33) United States of America       |
| (51) G01V 3/08                         | RADIOACTIVE PARTICLES, BUILDING       | United States of America            |
| (11) EP3092516                         | FACILITY PROVIDED THEREWITH,          | (51) G01V 99/00                     |
| (21) EP14700827.0                      | AND METHOD THEREFOR                   | (11) EP3410161                      |
| (47) 14.07.2021                        | (73) Comecer Netherlands B.V.         |                                     |

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|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|
| (21) EP18305610.0                                                                                | (33) Japan                                                                                                         | NAKAJIMA, Kazuhide                                                   |
| (47) 07.07.2021                                                                                  | (51) G02B 5/08                                                                                                     | SAKAMOTO, Taiji                                                      |
| (22) 17.05.2018                                                                                  | G02B 5/20                                                                                                          | SAITO, Koutaro                                                       |
| (54) METHOD OF EXPLORATION OF A HYDROCARBON SEDIMENTARY BASIN BY MEANS OF STRATIGRAPHIC MODELING | F21Y 115/30                                                                                                        | (31) 2016011873                                                      |
| (73) IFP Energies nouvelles                                                                      | F21V 7/24                                                                                                          | (32) 25.01.2016                                                      |
| (72) HAMON, Youri                                                                                | F21V 7/26                                                                                                          | (33) Japan                                                           |
| BARBIER, Mickael                                                                                 | F21V 7/28                                                                                                          | (51) G02B 6/12                                                       |
| GRANJEON, Didier                                                                                 | F21V 7/30                                                                                                          | G02B 6/122                                                           |
| CHAUVEAU, Benoit                                                                                 | F21V 9/30                                                                                                          | (11) EP3091380                                                       |
| (31) 1754935                                                                                     | (11) EP3572725                                                                                                     | (21) EP15166358.0                                                    |
| (32) 02.06.2017                                                                                  | (21) EP18741463.6                                                                                                  | (47) 07.07.2021                                                      |
| (33) France                                                                                      | (47) 07.07.2021                                                                                                    | (22) 05.05.2015                                                      |
| (51) G02B 3/00                                                                                   | (87) JP2018000289                                                                                                  | (54) OPTICAL COUPLING ARRANGEMENT                                    |
| G02B 13/24                                                                                       | 26.07.2018                                                                                                         | (73) Huawei Technologies Co., Ltd.                                   |
| (11) EP3575845                                                                                   | (22) 10.01.2018                                                                                                    | (72) Collins, Tom                                                    |
| (21) EP18305664.7                                                                                | (54) LIGHT EMITTING ELEMENT, FLUORESCENT LIGHT SOURCE DEVICE                                                       | Lamponi, Marco                                                       |
| (47) 14.07.2021                                                                                  | (73) Ushio Denki Kabushiki Kaisha                                                                                  | (51) G02B 6/12                                                       |
| (22) 30.05.2018                                                                                  | (72) KITAMURA, Seiji                                                                                               | G02B 6/293                                                           |
| (54) MULTICHANNEL CLOSE-UP IMAGING DEVICE                                                        | INOUE, Masaki                                                                                                      | H04J 14/02                                                           |
| (73) Depixus                                                                                     | (31) 2017008872                                                                                                    | (11) EP3514994                                                       |
| (72) VIEILLE, Thibault                                                                           | (32) 20.01.2017                                                                                                    | (21) EP17860311.4                                                    |
| (51) G02B 5/02                                                                                   | (33) Japan                                                                                                         | (47) 07.07.2021                                                      |
| G02B 27/10                                                                                       | (51) G02B 5/28                                                                                                     | (87) CN2017084037                                                    |
| G02B 27/42                                                                                       | G02B 1/115                                                                                                         | 19.04.2018                                                           |
| G02B 27/48                                                                                       | (11) EP3282292                                                                                                     | (22) 12.05.2017                                                      |
| G02F 1/1335                                                                                      | (21) EP16306040.3                                                                                                  | (54) CONTROL METHOD AND DEVICE FOR MICRO-RING RESONATOR              |
| (11) EP3155461                                                                                   | (47) 07.07.2021                                                                                                    | (73) Huawei Technologies Co., Ltd.                                   |
| (21) EP15742418.5                                                                                | (22) 09.08.2016                                                                                                    | (72) TU, Xin                                                         |
| (47) 14.07.2021                                                                                  | (54) OPTICAL ARTICLE COMPRISING AN INTERFERENTIAL COATING WITH A HIGH REFLECTION IN THE NEAR INFRARED REGION (NIR) | (31) 201610898337                                                    |
| (87) US2015035470                                                                                | (73) Essilor International                                                                                         | (32) 14.10.2016                                                      |
| 17.12.2015                                                                                       | (72) DING, Xingzhao                                                                                                | (33) China                                                           |
| (22) 12.06.2015                                                                                  | (51) G02B 5/30                                                                                                     | (51) G02B 6/27                                                       |
| (54) OPTICAL STACKS FOR SPARKLE REDUCTION                                                        | G02F 1/1335                                                                                                        | G02B 6/28                                                            |
| (73) 3M Innovative Properties Company                                                            | G02F 1/1337                                                                                                        | H04J 14/04                                                           |
| (72) SITTER, Brett J.                                                                            | (11) EP3118659                                                                                                     | H04B 10/2581                                                         |
| RADCLIFFE, Marc D.                                                                               | (21) EP15761823.2                                                                                                  | (11) EP3136145                                                       |
| HOFFEND, JR., Thomas R                                                                           | (47) 07.07.2021                                                                                                    | (21) EP15782719.7                                                    |
| HENNEN, Daniel W.                                                                                | (87) JP2015057065                                                                                                  | (47) 14.07.2021                                                      |
| STEINER, Michael L.                                                                              | 17.09.2015                                                                                                         | (87) JP2015060708                                                    |
| LIU, Lan H.                                                                                      | (22) 10.03.2015                                                                                                    | 29.10.2015                                                           |
| GOLLIER, Jacques                                                                                 | (54) GRID POLARIZER AND PHOTO-ALIGNMENT DEVICE                                                                     | (22) 06.04.2015                                                      |
| WEST, James Andrew                                                                               | (73) Ushio Denki Kabushiki Kaisha                                                                                  | (54) MULTICORE/MULTIMODE FIBER JOINING DEVICE                        |
| KOSIK-WILLIAMS, Ellen Marie                                                                      | (72) TSURUOKA Kazuyuki                                                                                             | (73) NATIONAL INSTITUTE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY |
| (31) 201462011984 P                                                                              | ARAKI Ryuhei                                                                                                       | (72) AWAJI, Yoshinari                                                |
| (32) 13.06.2014                                                                                  | NAWAKI Yohei                                                                                                       | KOBAYASHI, Tetsuya                                                   |
| (33) United States of America                                                                    | (31) 2014048221                                                                                                    | TAKAHATA, Taketoshi                                                  |
| (51) G02B 5/04                                                                                   | (32) 11.03.2014                                                                                                    | (31) 2014090704                                                      |
| G02B 5/30                                                                                        | (33) Japan                                                                                                         | (32) 24.04.2014                                                      |
| H01Q 15/06                                                                                       | (51) G02B 6/02                                                                                                     | (33) Japan                                                           |
| G01N 21/3581                                                                                     | G02B 6/26                                                                                                          | (51) G02B 6/38                                                       |
| (11) EP3570082                                                                                   | G02B 6/38                                                                                                          | (11) EP3497496                                                       |
| (21) EP19185566.7                                                                                | (11) EP3379307                                                                                                     | (21) EP17754904.5                                                    |
| (47) 14.07.2021                                                                                  | (21) EP16888211.6                                                                                                  | (47) 07.07.2021                                                      |
| (22) 20.05.2014                                                                                  | (47) 14.07.2021                                                                                                    | (87) US2017045696                                                    |
| (54) WAVE PLATE AND DIVIDED PRISM MEMBER                                                         | (87) JP2016088997                                                                                                  | 15.02.2018                                                           |
| (73) Hamamatsu Photonics K.K.                                                                    | 03.08.2017                                                                                                         | (22) 07.08.2017                                                      |
| (72) KAWADA, Yoichi                                                                              | (22) 27.12.2016                                                                                                    | (54) METHOD FOR FUSING A FIBER TERMINATION                           |
| YASUDA, Takashi                                                                                  | (54) ALIGNMENT DEVICE AND ALIGNMENT METHOD                                                                         | (73) Boston Scientific Scimed, Inc.                                  |
| NAKANISHI, Atsushi                                                                               | (73) Nippon Telegraph and Telephone Corporation                                                                    | (72) CHIA, Wen-Jui, Ray                                              |
| (31) 2013158037                                                                                  | (72) MATSUI, Takashi                                                                                               | HASENBERG, Thomas Charles                                            |
| (32) 30.07.2013                                                                                  |                                                                                                                    | (31) 201662374185 P                                                  |
|                                                                                                  |                                                                                                                    | (32) 12.08.2016                                                      |

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| (33) United States of America                                                                       | (33) China                                                                | (54) IMAGING APPARATUS AND PROGRAM                                     |
| (51) G02B 6/38                                                                                      | (51) G02B 19/00                                                           | (73) Nikon Corporation                                                 |
| G02B 6/44                                                                                           | G09G 5/10                                                                 | (72) FUKUTAKE, Naoki                                                   |
| (11) EP3296784                                                                                      | H01L 25/075                                                               | NAKAJIMA, Shinichi                                                     |
| (21) EP16189484.5                                                                                   | H01L 33/58                                                                | (31) 2011087821                                                        |
| (47) 14.07.2021                                                                                     | G02B 27/22                                                                | (32) 12.04.2011                                                        |
| (22) 19.09.2016                                                                                     | H04N 13/305                                                               | (33) Japan                                                             |
| (54) SUBSEA FIBER OPTICAL<br>TERMINATION MODULE                                                     | (11) EP2708936                                                            | (51) G02B 21/24                                                        |
| (73) Siemens Energy AS                                                                              | (21) EP12785276.2                                                         | (11) EP2579086                                                         |
| (72) Villmark, Trond Holger                                                                         | (47) 07.07.2021                                                           | (21) EP11786787.9                                                      |
| (51) G02B 6/44                                                                                      | (87) CN2012075205                                                         | (47) 07.07.2021                                                        |
| (11) EP2834692                                                                                      | 22.11.2012                                                                | (87) JP2011062287                                                      |
| (21) EP13711382.5                                                                                   | (22) 08.05.2012                                                           | 01.12.2011                                                             |
| (47) 07.07.2021                                                                                     | (54) LARGE 3D SCREEN BASED ON LIGHT<br>TUBES WITH CYLINDRICAL LENS        | (22) 27.05.2011                                                        |
| (87) EP2013055989                                                                                   | (73) Li, Chao                                                             | (54) INVERTED MICROSCOPE                                               |
| 10.10.2013                                                                                          | (72) LI, Chao                                                             | (73) Olympus Corporation                                               |
| (22) 21.03.2013                                                                                     | SHI, Daxin                                                                | (72) KITAHARA, Akihiro                                                 |
| (54) TELECOMMUNICATIONS ENCLOSURE<br>AND ORGANIZER                                                  | KANG, Xianbin                                                             | (31) 2010123440                                                        |
| (73) CommScope Connectivity Belgium BVBA                                                            | XIONG, Bin                                                                | (32) 28.05.2010                                                        |
| (72) AZNAG, Mohamed                                                                                 | LI, Shuzheng                                                              | (33) Japan                                                             |
| DE GROE, Emilie                                                                                     | (31) 201120151626 U                                                       | (51) G02B 23/16                                                        |
| KEUSTERMANS, Eric                                                                                   | 201110122809                                                              | G02B 7/182                                                             |
| HOUBEN, Diederik                                                                                    | (32) 13.05.2011                                                           | (11) EP3673313                                                         |
| COENEGRACHT, Philippe                                                                               | 13.05.2011                                                                | (21) EP18758612.8                                                      |
| DOULTREMONT, Pieter                                                                                 | (33) China                                                                | (47) 07.07.2021                                                        |
| VAN GENECHTEN, Geert                                                                                | China                                                                     | (87) EP2018072587                                                      |
| FREDERICKX, Maddy, Nadine                                                                           | (51) G02B 19/00                                                           | 28.02.2019                                                             |
| MICHIELS, Maarten                                                                                   | H01L 31/02                                                                | (22) 21.08.2018                                                        |
| (31) 201261619747 P                                                                                 | H01L 31/048                                                               | (54) TELESCOPE WITH IMPROVED<br>PERFORMANCE AND SIMPLIFIED<br>MOUNTING |
| 201361766514 P                                                                                      | H01L 31/054                                                               | (73) Safran Electronics & Defense                                      |
| (32) 03.04.2012                                                                                     | (11) EP3488472                                                            | (72) HOELTZEL, Charlotte                                               |
| 19.02.2013                                                                                          | (21) EP17748394.8                                                         | TACCONI, Cédric                                                        |
| (33) United States of America                                                                       | (47) 14.07.2021                                                           | FURUI, Christophe                                                      |
| United States of America                                                                            | (87) EP2017000850                                                         | SEILLIER, Franck                                                       |
| (51) G02B 6/44                                                                                      | 29.03.2018                                                                | ANNA, Guillaume                                                        |
| (11) EP3403125                                                                                      | (22) 15.07.2017                                                           | (31) 1700869                                                           |
| (21) EP17767658.2                                                                                   | (54) SOLAR CELL MODULE                                                    | (32) 22.08.2017                                                        |
| (47) 14.07.2021                                                                                     | (73) AZUR SPACE Solar Power GmbH                                          | (33) France                                                            |
| (87) US2017023027                                                                                   | (72) LÖCKENHOFF, Rüdiger                                                  | (51) G02B 23/16                                                        |
| 21.09.2017                                                                                          | (31) 102016011321                                                         | G02B 7/182                                                             |
| (22) 17.03.2017                                                                                     | (32) 21.09.2016                                                           | (11) EP3673311                                                         |
| (54) FIBER-OPTIC CABLE FANOUT<br>CONDUIT ARRANGEMENT AND<br>METHOD FOR ORGANIZING OPTICAL<br>FIBERS | (33) Germany                                                              | (21) EP18758610.2                                                      |
| (73) Commscope Technologies LLC                                                                     | (51) G02B 21/00                                                           | (47) 07.07.2021                                                        |
| (72) PETERSEN, Cyle D.                                                                              | G02F 1/11                                                                 | (87) EP2018072585                                                      |
| CAMPBELL, Brent                                                                                     | G02F 1/33                                                                 | 28.02.2019                                                             |
| (31) 201662310268 P                                                                                 | (11) EP2215517                                                            | (22) 21.08.2018                                                        |
| (32) 18.03.2016                                                                                     | (21) EP08846726.1                                                         | (54) TELESCOPE WITH SIMPLIFIED<br>MOUNTING                             |
| (33) United States of America                                                                       | (47) 07.07.2021                                                           | (73) Safran Electronics & Defense                                      |
| (51) G02B 13/00                                                                                     | (87) EP2008065052                                                         | (72) HOELTZEL, Charlotte                                               |
| G06F 1/16                                                                                           | 14.05.2009                                                                | TACCONI, Cédric                                                        |
| H04M 1/02                                                                                           | (22) 06.11.2008                                                           | FURUI, Christophe                                                      |
| G03B 11/04                                                                                          | (54) APPARATUS AND METHOD FOR<br>OPERATING AN ACOUSTOOPTICAL<br>COMPONENT | SEILLIER, Franck                                                       |
| (11) EP3561566                                                                                      | (73) Leica Microsystems CMS GmbH                                          | ANNA, Guillaume                                                        |
| (21) EP19170467.5                                                                                   | (72) SEYFRIED, Volker                                                     | (31) 1700867                                                           |
| (47) 07.07.2021                                                                                     | (31) 102007053199                                                         | (32) 22.08.2017                                                        |
| (22) 23.04.2019                                                                                     | (32) 06.11.2007                                                           | (33) France                                                            |
| (54) TERMINAL DISPLAY ASSEMBLY AND<br>MOBILE TERMINAL                                               | (33) Germany                                                              | (51) G02B 26/02                                                        |
| (73) GUANGDONG OPPO MOBILE<br>TELECOMMUNICATIONS CORP., LTD.                                        | (51) G02B 21/14                                                           | (11) EP3086158                                                         |
| (72) CHENG, Jiao                                                                                    | G02B 21/36                                                                | (21) EP16166746.4                                                      |
| (31) 201820617479 U                                                                                 | (11) EP2697680                                                            | (47) 07.07.2021                                                        |
| (32) 26.04.2018                                                                                     | (21) EP12705173.8                                                         | (22) 20.05.2008                                                        |
|                                                                                                     | (47) 07.07.2021                                                           | (54) ELECTROWETTING ELEMENT                                            |
|                                                                                                     | (87) JP2012052567                                                         | (73) Amazon Europe Holding Technologies                                |
|                                                                                                     | 18.10.2012                                                                | SCS                                                                    |
|                                                                                                     | (22) 30.01.2012                                                           | (72) HAYES, Robert                                                     |

|                                              |                                         |                                            |
|----------------------------------------------|-----------------------------------------|--------------------------------------------|
| MASSARD, Romaric                             | WIEMER, Michael, West                   | (22) 23.05.2017                            |
| VAN DE WEIJER-WAGEMANS, Melanie              | (31) 201662415376 P                     | (54) METHOD FOR MANUFACTURING AN           |
| Maria Hubertina                              | 201762473268 P                          | ELECTRO-ABSORPTION MODULATOR               |
| (31) 0709897                                 | (32) 31.10.2016                         | (73) Nokia Solutions and Networks Oy       |
| (32) 23.05.2007                              | 17.03.2017                              | (72) ACHOUCHE, Mohand                      |
| (33) United Kingdom                          | (33) United States of America           | DEBREGEAS, Hélène                          |
| (51) G02B 26/08                              | United States of America                | (51) G02F 1/025                            |
| (11) EP2706394                               | (51) G02B 27/64                         | (11) EP3734353                             |
| (21) EP13020090.0                            | H04N 5/225                              | (21) EP20174609.6                          |
| (47) 14.07.2021                              | G02B 7/02                               | (47) 07.07.2021                            |
| (22) 11.09.2013                              | G02B 7/10                               | (22) 27.07.2017                            |
| (54) Optical deflector including mirror with | G03B 3/02                               | (54) MODULATOR OF PROPAGATION              |
| recessed rib on its rear surface             | G03B 5/00                               | LOSSES AND OF THE PROPAGATION              |
| (73) STANLEY ELECTRIC CO., LTD.              | (11) EP3112913                          | INDEX OF AN OPTICAL SIGNAL                 |
| (72) Ikegami, Keiichi                        | (21) EP15755272.0                       | (73) COMMISSARIAT À L'ÉNERGIE              |
| (31) 2012199385                              | (47) 07.07.2021                         | ATOMIQUE ET AUX ÉNERGIES                   |
| (32) 11.09.2012                              | (87) KR2015001242                       | ALTERNATIVES                               |
| (33) Japan                                   | 03.09.2015                              | (72) MENEZO, Sylvie                        |
| (51) G02B 26/08                              | (22) 06.02.2015                         | GIRARD, Olivier                            |
| G02B 26/10                                   | (54) LENS BARREL, IMAGING ELEMENT       | (31) 1657626                               |
| H01L 41/04                                   | SUPPORT STRUCTURE, ELECTRONIC           | (32) 08.08.2016                            |
| H01L 41/08                                   | VIEW FINDER, AND IMAGING DEVICE         | (33) France                                |
| H01L 41/09                                   | (73) Samsung Electronics Co., Ltd.      | (51) G02F 1/133                            |
| H01L 41/187                                  | (72) SHIRONO, Masahiro                  | G08B 7/06                                  |
| (11) EP3203298                               | (31) 2014038122                         | G09F 9/30                                  |
| (21) EP15847123.5                            | 2014165433                              | G09F 9/35                                  |
| (47) 14.07.2021                              | (32) 28.02.2014                         | G09F 27/00                                 |
| (87) JP2015077588                            | 15.08.2014                              | (11) EP3462433                             |
| 07.04.2016                                   | (33) Japan                              | (21) EP18197376.9                          |
| (22) 29.09.2015                              | Japan                                   | (47) 14.07.2021                            |
| (54) MIRROR DRIVE DEVICE AND DRIVE           | (51) G02C 7/04                          | (22) 27.09.2018                            |
| METHOD THEREFOR                              | (11) EP2748673                          | (54) SAFETY OR RESCUE SIGNAL LIGHT         |
| (73) FUJIFILM Corporation                    | (21) EP12758691.5                       | AND SAFETY LIGHTING SYSTEM                 |
| (72) NAONO, Takayuki                         | (47) 14.07.2021                         | (73) DIN-Dietmar Nocker Facilitymanagement |
| (31) 2014201650                              | (87) US2012050704                       | GmbH                                       |
| (32) 30.09.2014                              | 07.03.2013                              | (31) 17193516                              |
| (33) Japan                                   | (22) 14.08.2012                         | (32) 27.09.2017                            |
| (51) G02B 26/12                              | (54) TRANSLATING PRESBYOPIC             | (33) European Patent Office (EPO)          |
| G02B 27/00                                   | CONTACT LENS PAIR                       | (51) G02F 1/1333                           |
| H04N 1/00                                    | (73) Johnson & Johnson Vision Care Inc. | G02F 1/13357                               |
| (11) EP2993511                               | (72) ROFFMAN, Jeffrey H.                | (11) EP2527911                             |
| (21) EP15183836.4                            | MENEZES, Edgar                          | (21) EP12166433.8                          |
| (47) 14.07.2021                              | CHEHAB, Khaled A.                       | (47) 07.07.2021                            |
| (22) 04.09.2015                              | (31) 201113218627                       | (22) 02.05.2012                            |
| (54) LIGHT SCANNING APPARATUS                | (32) 26.08.2011                         | (54) Display                               |
| AND IMAGE FORMING APPARATUS                  | (33) United States of America           | (73) Saturn Licensing LLC                  |
| EMPLOYING THE SAME                           | (51) G02C 7/06                          | (72) Fujii, Hiroaki                        |
| (73) Hewlett-Packard Development Company,    | (11) EP3128361                          | Mukoyama, Satoshi                          |
| L.P.                                         | (21) EP15774484.8                       | Araki, Soya                                |
| (72) PARK, Chul-hyun                         | (47) 14.07.2021                         | Tsuboi, Hisanori                           |
| LEE, In-sung                                 | (87) JP2015058260                       | Miyake, Hidetomo                           |
| (31) 20140117826                             | 08.10.2015                              | (31) 2011116244                            |
| (32) 04.09.2014                              | (22) 19.03.2015                         | (32) 24.05.2011                            |
| (33) Korea (Republic)                        | (54) PROGRESSIVE ADDITION               | (33) Japan                                 |
| (51) G02B 27/00                              | LENS, DESIGN METHOD AND                 | (51) G02F 1/1333                           |
| (11) EP3532888                               | MANUFACTURING METHOD                    | G02F 1/13357                               |
| (21) EP17865912.4                            | THEREFOR, AND PROGRESSIVE               | (11) EP3660578                             |
| (47) 14.07.2021                              | ADDITION LENS MANUFACTURING             | (21) EP18854664.2                          |
| (87) US2017057240                            | SYSTEM                                  | (47) 14.07.2021                            |
| 03.05.2018                                   | (73) Hoya Lens Thailand Ltd.            | (87) KR2018010261                          |
| (22) 18.10.2017                              | (72) KOZU Kazuma                        | 14.03.2019                                 |
| (54) FEMTOPROJECTOR OPTICAL                  | (31) 2014072856                         | (22) 04.09.2018                            |
| SYSTEMS                                      | (32) 31.03.2014                         | (54) DISPLAY MODULE AND DISPLAY            |
| (73) Tectus Corporation                      | (33) Japan                              | DEVICE HAVING SAME                         |
| (72) MILLER, Gregory, David                  | (51) G02F 1/017                         | (73) Samsung Electronics Co., Ltd.         |
| LEMOFF, Brian, Elliot                        | (11) EP3407122                          | (72) KIM, Min Sik                          |
| MIHALAKIS, George, Michael                   | (21) EP17305606.0                       | KIM, Myeong Gil                            |
| MAYNARD, Ronald                              | (47) 14.07.2021                         | IN, Woo Sung                               |

|                                     |                                           |                                     |
|-------------------------------------|-------------------------------------------|-------------------------------------|
| JUNG, Hyun Jun                      | (22) 09.05.2018                           | (51) G03B 17/14                     |
| HAN, Jong Hee                       | (54) GROUND STRUCTURE AND MOBILE          | G03B 17/56                          |
| (31) 20170115804                    | TERMINAL                                  | (11) EP3410188                      |
| (32) 11.09.2017                     | (73) Vivo Mobile Communication Co., Ltd.  | (21) EP18175011.8                   |
| (33) Korea (Republic)               | (72) MU, Qing                             | (47) 07.07.2021                     |
| (51) G02F 1/1333                    | HUANG, Yong                               | (22) 30.05.2018                     |
| G02F 1/1343                         | DAI, Huayong                              | (54) IMAGING APPARATUS WITH BAYONET |
| G06F 3/041                          | (31) 201710369658                         | MOUNT AND ACCESSORY WITH            |
| G06F 3/044                          | (32) 23.05.2017                           | BAYONET MOUNT                       |
| (11) EP3173913                      | (33) China                                | (73) CANON KABUSHIKI KAISHA         |
| (21) EP16200773.6                   | (51) G02F 1/21                            | (72) HONDA, Takanori                |
| (47) 07.07.2021                     | G02F 1/225                                | (31) 2017108278                     |
| (22) 25.11.2016                     | H03K 5/00                                 | (32) 31.05.2017                     |
| (54) DISPLAY DEVICE WITH INTEGRATED | (11) EP3292632                            | (33) Japan                          |
| TOUCH SCREEN                        | (21) EP16799200.7                         | (51) G03B 21/20                     |
| (73) LG Display Co., Ltd.           | (47) 07.07.2021                           | (11) EP3567426                      |
| (72) YOON, Kyuhan                   | (87) CN2016081150                         | (21) EP19725917.9                   |
| HAN, JungWoo                        | 01.12.2016                                | (47) 07.07.2021                     |
| (31) 20150169456                    | (22) 05.05.2016                           | (87) CN2019075377                   |
| (32) 30.11.2015                     | (54) ELECTRONIC DRIVER CIRCUIT            | 19.09.2019                          |
| (33) Korea (Republic)               | AND METHOD FOR DRIVING A                  | (22) 18.02.2019                     |
| (51) G02F 1/1335                    | DISTRIBUTED MACH-ZEHNDER                  | (54) LASER PROJECTION MODULE,       |
| G02F 1/1343                         | MODULATOR (MZM) WITH DRIVER               | DEPTH CAMERA, AND ELECTRONIC        |
| G02F 1/1362                         | DELAY COMPENSATION                        | DEVICE                              |
| G09G 3/34                           | (73) Huawei Technologies Co., Ltd.        | (73) GUANGDONG OPPO MOBILE          |
| G09G 3/36                           | (72) CHEN, Morgan                         | TELECOMMUNICATIONS CORP., LTD.      |
| (11) EP3108473                      | GU, Yifan                                 | (72) WEI, Yi                        |
| (21) EP15706664.8                   | LEE, HungYi                               | (31) 201810201139                   |
| (47) 14.07.2021                     | GU, Liang                                 | 201810200425                        |
| (87) US2015016535                   | DANG, Yen                                 | (32) 12.03.2018                     |
| 27.08.2015                          | LEI, Gong                                 | 12.03.2018                          |
| (22) 19.02.2015                     | CAO, Yuming                               | (33) China                          |
| (54) DISPLAY SYSTEM WITH            | SHEN, Xiao Andy                           | China                               |
| INDEPENDENTLY CONTROLLED            | BAI, YuSheng                              | (51) G03F 1/62                      |
| TRANSMISSIVE AND REFLECTIVE         | (31) 201514723839                         | (11) EP3404486                      |
| SUBPIXELS AND METHOD OF USE         | (32) 28.05.2015                           | (21) EP17171171.6                   |
| THEREOF                             | (33) United States of America             | (47) 14.07.2021                     |
| (73) Google Technology Holdings LLC | (51) G02F 1/35                            | (22) 15.05.2017                     |
| (72) ZHUANG, Li                     | H03F 3/189                                | (54) A METHOD FOR FORMING A         |
| RIPLEY, Ross, W.                    | H03F 3/54                                 | PELLICLE                            |
| YANG, Sen                           | H03F 7/00                                 | (73) IMEC vzw                       |
| (31) 201414186391                   | H03F 19/00                                | IMEC USA NANOELECTRONICS            |
| (32) 21.02.2014                     | (11) EP3424143                            | DESIGN CENTER, Inc.                 |
| (33) United States of America       | (21) EP17710036.9                         | (72) TIMMERMANS, Marina             |
| (51) G02F 1/1345                    | (47) 07.07.2021                           | GALLAGHER, Emily                    |
| G02F 1/1362                         | (87) GB2017050572                         | POLLENTIER, Ivan                    |
| G09G 3/36                           | 08.09.2017                                | ADELMANN, Christoph                 |
| (11) EP3142103                      | (22) 03.03.2017                           | HUYGHEBAERT, Cedric                 |
| (21) EP16187911.9                   | (54) FOUR WAVE MIXING TRANSMISSION        | LEE, Jae Uk                         |
| (47) 07.07.2021                     | LINE                                      | (51) G03F 7/027                     |
| (22) 08.09.2016                     | (73) Oxford University Innovation Limited | C09D 11/023                         |
| (54) DISPLAY DEVICE                 | (72) TAN, Boon Kok                        | C09D 11/101                         |
| (73) Samsung Display Co., Ltd.      | (31) 201603700                            | (11) EP3540513                      |
| (72) LEE, Seung-Kyu                 | (32) 03.03.2016                           | (21) EP19162391.7                   |
| KWON, Tae hoon                      | (33) United Kingdom                       | (47) 14.07.2021                     |
| KA, Ji-Hyun                         | (51) G03B 17/14                           | (22) 12.03.2019                     |
| (31) 20150129682                    | G03B 17/56                                | (54) DIGITAL OFFSET LITHOGRAPHY     |
| (32) 14.09.2015                     | (11) EP3410194                            | INK COMPOSITION, PROCESS OF         |
| (33) Korea (Republic)               | (21) EP18175022.5                         | DIGITAL OFFSET PRINTING AND         |
| (51) G02F 1/1362                    | (47) 07.07.2021                           | PROCESS FOR PROVIDING THE INK       |
| G06F 1/16                           | (22) 30.05.2018                           | COMPOSITION                         |
| H02H 9/04                           | (54) IMAGING APPARATUS AND                | (73) Xerox Corporation              |
| H04M 1/02                           | ACCESSORY                                 | (72) ALLEN, C. Geoffrey             |
| (11) EP3633960                      | (73) CANON KABUSHIKI KAISHA               | MOORLAG, Carolyn                    |
| (21) EP18805739.2                   | (72) YAMANA, Kazuaki                      | MAGDALINIS, Aurelian Valeriu        |
| (47) 14.07.2021                     | (31) 2017108280                           | ABRAHAM, Biby Esther                |
| (87) CN2018086119                   | (32) 31.05.2017                           | LEE, Jonathan Siu-Chung             |
| 29.11.2018                          | (33) Japan                                | (31) 201815920652                   |

|                                   |                                          |                                           |
|-----------------------------------|------------------------------------------|-------------------------------------------|
| (32) 14.03.2018                   | BLANKENSHIP, David A.                    | FUJIWARA, Yuji                            |
| (33) United States of America     | VAGLIO PRET, Alessandro                  | SHIMURA, Yasuhiro                         |
| (51) G03F 7/033                   | (31) 201662363041 P                      | (31) 2017098248                           |
| (11) EP3745205                    | 201615232302                             | 2017223013                                |
| (21) EP20175706.9                 | (32) 15.07.2016                          | (32) 17.05.2017                           |
| (47) 14.07.2021                   | 09.08.2016                               | 20.11.2017                                |
| (22) 20.05.2020                   | (33) United States of America            | (33) Japan                                |
| (54) FLEXOGRAPHIC PRINTING        | United States of America                 | Japan                                     |
| ORIGINAL PLATE AND METHOD         | (51) G03F 9/00                           | (51) G03G 15/00                           |
| FOR PRODUCING FLEXOGRAPHIC        | (11) EP3655821                           | G06F 1/32                                 |
| PRINTING PLATE                    | (21) EP18737918.5                        | (11) EP2881796                            |
| (73) Asahi Kasei Kabushiki Kaisha | (47) 14.07.2021                          | (21) EP14194922.2                         |
| (72) TABATA, Shusaku              | (87) EP2018068793                        | (47) 07.07.2021                           |
| ANZAI, Nobuhiro                   | 24.01.2019                               | (22) 26.11.2014                           |
| (31) 2019100050                   | (22) 11.07.2018                          | (54) Electronic device and method for     |
| (32) 29.05.2019                   | (54) INTERFERENCE LITHOGRAPHY            | controlling power supply                  |
| (33) Japan                        | PROCESS AND SYSTEM                       | (73) Kyocera Document Solutions Inc.      |
| (51) G03F 7/16                    | (73) Université de Technologie de Troyes | (72) Furushige, Katsuji                   |
| G03F 7/20                         | (72) LERONDEL, Gilles                    | Okuda, Masaya                             |
| G03F 7/38                         | TOURY, Timothée                          | Hirota, Masato                            |
| H01L 21/027                       | IBRAHIM, Joyce                           | (31) 2013248550                           |
| G03F 1/00                         | RUMYANTSEVA, Anna                        | (32) 29.11.2013                           |
| (11) EP3479172                    | (31) 1756863                             | (33) Japan                                |
| (21) EP17820718.9                 | (32) 19.07.2017                          | (51) G03G 15/02                           |
| (47) 14.07.2021                   | (33) France                              | G03G 15/11                                |
| (87) US2017030511                 | (51) G03G 9/097                          | G03G 15/18                                |
| 04.01.2018                        | (11) EP3543792                           | (11) EP3042247                            |
| (22) 02.05.2017                   | (21) EP18192164.4                        | (21) EP13893159.7                         |
| (54) APPARATUS FOR POST EXPOSURE  | (47) 14.07.2021                          | (47) 14.07.2021                           |
| BAKE                              | (22) 03.09.2018                          | (87) US2013058559                         |
| (73) Applied Materials, Inc.      | (54) ELECTROSTATIC CHARGE                | 12.03.2015                                |
| (72) HANSON, Kyle M.              | IMAGE DEVELOPING TONER AND               | (22) 06.09.2013                           |
| WILSON, Gregory J.                | ELECTROSTATIC CHARGE IMAGE               | (54) LIQUID ELECTROGRAPHY PRINTING        |
| BABAYAN, Viachslav                | DEVELOPER                                | (73) Hewlett-Packard Development Company, |
| (31) 201615196725                 | (73) FUJIFILM Business Innovation Corp.  | L.P.                                      |
| (32) 29.06.2016                   | (72) YAMAGISHI, Yuka                     | (72) GILA, Omer                           |
| (33) United States of America     | IGUCHI, Moegi                            | CHANG, Seongsik                           |
| (51) G03F 7/20                    | SAITO, Yutaka                            | LEE, Michael H.                           |
| G03F 1/70                         | TASAKI, Mona                             | (51) G03G 15/08                           |
| (11) EP3193271                    | KAKEHI, Soutaro                          | (11) EP2664966                            |
| (21) EP16200435.2                 | TAKAHASHI, Sakon                         | (21) EP13167771.8                         |
| (47) 14.07.2021                   | (31) 2018054946                          | (47) 07.07.2021                           |
| (22) 24.11.2016                   | (32) 22.03.2018                          | (22) 15.05.2013                           |
| (54) MULTIPLE PATTERNING LAYOUT   | (33) Japan                               | (54) Developer accomodating unit,         |
| DECOMPOSITION CONSIDERING         | (51) G03G 15/00                          | developing device, process cartridge      |
| COMPLEX COLORING RULES            | G03G 15/16                               | and electrophotographic image forming     |
| (73) Synopsys, Inc.               | (11) EP3101482                           | apparatus                                 |
| (72) CHANG, Hua-Yu                | (21) EP16170782.3                        | (73) Canon Kabushiki Kaisha               |
| (31) 201562260227 P               | (47) 07.07.2021                          | (72) Kashiide, Yosuke                     |
| (32) 25.11.2015                   | (22) 23.05.2016                          | Yamaguchi, Noritomo                       |
| (33) United States of America     | (54) IMAGE FORMING APPARATUS             | Fukui, Yuichi                             |
| (51) G03F 7/20                    | (73) Canon Kabushiki Kaisha              | (31) 2012113246                           |
| G03F 7/30                         | (72) KAKEHI, Yutaka                      | 2013097299                                |
| G03F 7/32                         | (31) 2015112020                          | (32) 17.05.2012                           |
| (11) EP3465349                    | 2016040270                               | 07.05.2013                                |
| (21) EP17828585.4                 | (32) 02.06.2015                          | (33) Japan                                |
| (47) 07.07.2021                   | 02.03.2016                               | Japan                                     |
| (87) US2017042257                 | (33) Japan                               | (51) G03G 15/08                           |
| 18.01.2018                        | Japan                                    | G03G 21/16                                |
| (22) 14.07.2017                   | (51) G03G 15/00                          | (11) EP3422112                            |
| (54) IMPROVED METHOD FOR COMPUTER | G03G 15/20                               | (21) EP17774905.8                         |
| MODELING AND SIMULATION OF        | (11) EP3404491                           | (47) 07.07.2021                           |
| NEGATIVE-TONE-DEVELOPABLE         | (21) EP18172562.3                        | (87) JP2017012338                         |
| PHOTORESISTS                      | (47) 07.07.2021                          | 05.10.2017                                |
| (73) Kla-Tencor Corporation       | (22) 16.05.2018                          | (22) 27.03.2017                           |
| (72) BIAFORE, John J.             | (54) IMAGE FORMING APPARATUS             | (54) TONER CARTRIDGE                      |
| SMITH, Mark D.                    | (73) CANON KABUSHIKI KAISHA              | (73) Brother Kogyo Kabushiki Kaisha       |
| GRAVES, Trey (John) S.            | (72) OGURA, Ryota                        | (72) NISHIYAMA, Hideshi                   |

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| (31) 2016073400                                                                                                  | (22) 17.04.2018                                             | (72) OIKAWA, Shuto                                                                                                |
| (32) 31.03.2016                                                                                                  | (54) LOCKING DEVICE FOR A TIMEPIECE MECHANISM               | (31) 2017186896                                                                                                   |
| (33) Japan                                                                                                       | (73) Patek Philippe SA Genève                               | (32) 27.09.2017                                                                                                   |
| (51) G03G 15/08                                                                                                  | (72) HIDE, James                                            | (33) Japan                                                                                                        |
| G03G 21/16                                                                                                       | OES, Stéphane                                               | (51) G05B 5/01                                                                                                    |
| G03G 21/18                                                                                                       | MAIER, Frédéric                                             | (11) EP3698220                                                                                                    |
| (11) EP3258321                                                                                                   | (31) 17166832                                               | (21) EP17817662.4                                                                                                 |
| (21) EP17181905.5                                                                                                | (32) 18.04.2017                                             | (47) 14.07.2021                                                                                                   |
| (47) 14.07.2021                                                                                                  | (33) European Patent Office (EPO)                           | (87) EP2017080192                                                                                                 |
| (22) 25.01.2010                                                                                                  | (51) G04B 15/14                                             | 31.05.2019                                                                                                        |
| (54) DETACHABLE TONER CARTRIDGE AND IMAGE FORMING APPARATUS INCLUDING THE SAME                                   | G04B 17/04                                                  | (22) 23.11.2017                                                                                                   |
| (73) Hewlett-Packard Development Company, L.P.                                                                   | G04B 17/20                                                  | (54) METHOD, CONTROLLER, AND COMPUTER PROGRAM PRODUCT FOR REDUCING OSCILLATIONS IN A TECHNICAL SYSTEM             |
| (72) YOON, Young-min                                                                                             | (11) EP3410229                                              | (73) Siemens Aktiengesellschaft                                                                                   |
| KWON, Se-il                                                                                                      | (21) EP17173350.4                                           | (72) DÜLL, Siegmund                                                                                               |
| KWON, Young-jo                                                                                                   | (47) 14.07.2021                                             | HEESCHE, Kai                                                                                                      |
| (31) 20090080720                                                                                                 | (22) 30.05.2017                                             | SINGH, Gurdev                                                                                                     |
| (32) 28.08.2009                                                                                                  | (54) TIMEPIECE COMPONENT WITH A FLEXIBLE PIVOT              | WEBER, Marc Christian                                                                                             |
| (33) Korea (Republic)                                                                                            | (73) Patek Philippe SA Genève                               | (51) G05B 13/02                                                                                                   |
| (51) G03G 21/10                                                                                                  | (72) CHABLOZ, David                                         | G05B 19/042                                                                                                       |
| (11) EP3156851                                                                                                   | (51) G04B 19/28                                             | (11) EP3561615                                                                                                    |
| (21) EP16193452.6                                                                                                | G04B 19/30                                                  | (21) EP18168845.8                                                                                                 |
| (47) 07.07.2021                                                                                                  | G04C 10/00                                                  | (47) 14.07.2021                                                                                                   |
| (22) 12.10.2016                                                                                                  | G04C 17/02                                                  | (22) 23.04.2018                                                                                                   |
| (54) ACCOMMODATING CONTAINER, CLEANING DEVICE, DEVELOPING DEVICE, PROCESS CARTRIDGE, AND IMAGE FORMING APPARATUS | (11) EP3572886                                              | (54) METHOD FOR OPERATING AN AUTOMATION SYSTEM AND AUTOMATION SYSTEM                                              |
| (73) Canon Kabushiki Kaisha                                                                                      | (21) EP18173871.7                                           | (73) OMRON CORPORATION                                                                                            |
| (72) MAEDA, Naoki                                                                                                | (47) 14.07.2021                                             | (72) NASER, Mohammad                                                                                              |
| KOMATSU, Noriyuki                                                                                                | (22) 23.05.2018                                             | KNAAP, Dingeman                                                                                                   |
| MATSUMARU, Naoki                                                                                                 | (54) WATCH COMPRISING AN ELEMENT HAVING A LIGHTING INDEX    | YURCHENKO, Mariya                                                                                                 |
| MURAKAMI, Ryuta                                                                                                  | (73) The Swatch Group Research and Development Ltd          | (51) G05B 13/02                                                                                                   |
| HAMADA, Takatoshi                                                                                                | (72) TORTORA, Pierpasquale                                  | H02P 9/10                                                                                                         |
| NOSHO, Hiroaki                                                                                                   | STALDER, Michael                                            | (11) EP3044638                                                                                                    |
| (31) 2015202501                                                                                                  | REINAUER, Olga                                              | (21) EP13893614.1                                                                                                 |
| (32) 14.10.2015                                                                                                  | (51) G04C 19/02                                             | (47) 14.07.2021                                                                                                   |
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| (51) G03H 1/08                                                                                                   | H05B 47/115                                                 | 19.03.2015                                                                                                        |
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| (47) 07.07.2021                                                                                                  | H05B 47/175                                                 | (73) Volvo Construction Equipment AB                                                                              |
| (87) EP2008056029                                                                                                | (11) EP2846202                                              | (72) ZHAO, Yaang                                                                                                  |
| 20.11.2008                                                                                                       | (21) EP14183470.5                                           | HIDISH, Andrew                                                                                                    |
| (22) 16.05.2008                                                                                                  | (47) 07.07.2021                                             | (51) G05B 13/04                                                                                                   |
| (54) HOLOGRAPHIC DISPLAY WITH COMMUNICATIONS                                                                     | (22) 04.09.2014                                             | G05B 17/02                                                                                                        |
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| (72) KROLL, Bo                                                                                                   | (73) Panasonic Intellectual Property Corporation of America | (21) EP10725542.4                                                                                                 |
| MISSBACH, Robert                                                                                                 | (72) Ogawa, Kento                                           | (47) 14.07.2021                                                                                                   |
| SCHWERDTNER, Alexander                                                                                           | Tanigawa, Toru                                              | (87) US2010034833                                                                                                 |
| (31) 0709379                                                                                                     | (31) 2013187135                                             | 18.11.2010                                                                                                        |
| 0718632                                                                                                          | (32) 10.09.2013                                             | (22) 14.05.2010                                                                                                   |
| (32) 16.05.2007                                                                                                  | (33) Japan                                                  | (54) INVERSE MODELING FOR CHARACTERISTIC PREDICTION FROM MULTI-SPECTRAL AND HYPER-SPECTRAL REMOTE SENSED DATASETS |
| 25.09.2007                                                                                                       | (51) G04G 9/00                                              | (73) PIONEER HI-BRED INTERNATIONAL, INC.                                                                          |
| (33) United Kingdom                                                                                              | G04G 5/00                                                   | (72) LIGHTNER, Jonathan E.                                                                                        |
| United Kingdom                                                                                                   | G04R 20/02                                                  | WRIGHT, Steven L.                                                                                                 |
| (51) G04B 1/12                                                                                                   | G04R 20/08                                                  | VALVERDE, Federico                                                                                                |
| G04B 15/10                                                                                                       | G04R 20/26                                                  | (31) 178251 P                                                                                                     |
| G04B 17/04                                                                                                       | G04R 20/28                                                  | (32) 14.05.2009                                                                                                   |
| G04B 19/243                                                                                                      | (11) EP3462253                                              | (33) United States of America                                                                                     |
| (11) EP3612896                                                                                                   | (21) EP18196962.7                                           |                                                                                                                   |
| (21) EP18719312.3                                                                                                | (47) 14.07.2021                                             |                                                                                                                   |
| (47) 14.07.2021                                                                                                  | (22) 26.09.2018                                             |                                                                                                                   |
| (87) IB2018052645                                                                                                | (54) ELECTRONIC TIMEPIECE AND CONTROL METHOD                |                                                                                                                   |
| 25.10.2018                                                                                                       | (73) Casio Computer Co., Ltd.                               |                                                                                                                   |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| (51) G05B 15/02<br>(11) EP3644140<br>(21) EP19180258.6<br>(47) 07.07.2021<br>(22) 14.06.2019<br>(54) SMART BUILDING SYSTEM<br>(73) Xandar Kardian<br>(72) YANG, Sun Jong<br>CHOI, Jeong Woo<br>(31) 20180126431<br>(32) 23.10.2018<br>(33) Korea (Republic)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | (54) METHOD FOR REPLACING AND/OR CLONING AT LEAST SOME DEVICES OF A MACHINE<br>(73) Schneider Electric Industries SAS<br>(72) Givehchi, Omid<br>Platzer, Christian<br>(51) G05B 19/042<br>(11) EP3211494<br>(21) EP17157556.6<br>(47) 14.07.2021<br>(22) 23.02.2017<br>(54) MOTOR CONTROL SYSTEM, ROBOT SYSTEM, AND COMMUNICATION METHOD FOR MOTOR CONTROL SYSTEM<br>(73) Kabushiki Kaisha Yaskawa Denki<br>(72) KOBAYASHI, Kazutoshi<br>MIWA, Takuya<br>FUKUDA, Mamoru<br>KASHIWAGI, Yoshitaka<br>KOGA, Hidetsugu<br>IMANAGA, Kazuhiro<br>OKUBO, Tadashi<br>(31) 2016037490<br>2016055616<br>(32) 29.02.2016<br>18.03.2016<br>(33) Japan<br>Japan                                                                                                                                                                                                     | (73) Siemens Aktiengesellschaft<br>(72) Gerlach, Hendrik<br>Schlittenbauer, Markus<br>(51) G05B 19/05<br>(11) EP3336627<br>(21) EP16834987.6<br>(47) 07.07.2021<br>(87) JP2016072126<br>16.02.2017<br>(22) 28.07.2016<br>(54) SUPPORT DEVICE, METHOD, AND RECORDING MEDIUM WHEREON SUPPORT PROGRAM IS STORED<br>(73) Omron Corporation<br>(72) UNNO, Takashi<br>SAKUMA, Takashi<br>(31) 2015158172<br>(32) 10.08.2015<br>(33) Japan<br>(51) G05B 19/05<br>G06F 13/00<br>G09B 9/00<br>G09B 9/08<br>(11) EP2939227<br>(21) EP14853153.6<br>(47) 14.07.2021<br>(87) CA2014000323<br>01.10.2015<br>(22) 04.04.2014<br>(54) A CONFIGURABLE SIMULATOR FOR PERFORMING A DISTRIBUTED SIMULATION<br>(73) CAE Inc.<br>(72) GALIBOIS, Michel<br>CÔTÉ, Yanick<br>(31) 201414226561<br>(32) 26.03.2014<br>(33) United States of America<br>(51) G05B 19/406<br>G05B 23/02<br>(11) EP3557346<br>(21) EP19167129.6<br>(47) 07.07.2021<br>(22) 03.04.2019<br>(54) STATE IDENTIFICATION DEVICE, STATE IDENTIFICATION METHOD AND MECHANICAL DEVICE<br>(73) Hitachi, Ltd.<br>(72) SAKAI, Hideo<br>MAEDA, Masaaki<br>SAKURAI, Yuichi<br>TAKAHASHI, Masayoshi<br>(31) 2018081288<br>(32) 20.04.2018<br>(33) Japan<br>(51) G05B 19/409<br>G06F 3/01<br>G06F 3/0488<br>(11) EP3662353<br>(21) EP18765535.2<br>(47) 07.07.2021<br>(87) AT2018060162<br>07.02.2019<br>(22) 25.07.2018<br>(54) INDUSTRIAL OPERATING PANEL<br>(73) KEBA AG<br>(72) HOCHHOLDINGER, Michael Anton<br>(31) 506372017 |
| (51) G05B 15/02<br>F24F 11/30<br>F24F 11/32<br>F24F 11/63<br>(11) EP3348925<br>(21) EP18151376.3<br>(47) 14.07.2021<br>(22) 12.01.2018<br>(54) AIR-CONDITIONER SYSTEM AND CONTROL METHOD<br>(73) LG Electronics Inc.<br>(72) KIM, Myungkyoon<br>KIM, Juntae<br>JUNG, Seunghwan<br>(31) 20170005517<br>(32) 12.01.2017<br>(33) Korea (Republic)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | (51) G05B 19/042<br>G05B 19/418<br>(11) EP3324257<br>(21) EP16199562.6<br>(47) 14.07.2021<br>(22) 18.11.2016<br>(54) METHOD AND SYSTEM FOR OPERATION OF TECHNICAL DEVICES USED IN AUTOMATION TECHNOLOGY<br>(73) Schneider Electric Industries SAS<br>(72) ZINN, Marcus<br>(51) G05B 19/042<br>H04L 9/08<br>H04L 29/06<br>H04L 29/08<br>(11) EP3711275<br>(21) EP18803952.3<br>(47) 14.07.2021<br>(87) EP2018081240<br>23.05.2019<br>(22) 14.11.2018<br>(54) ENCRYPTED COMMUNICATION IN A PROCESSING INSTALLATION<br>(73) Samson Aktiengesellschaft<br>(72) WIDL, Andreas<br>URBAS, Leon<br>(31) 102017126916<br>(32) 15.11.2017<br>(33) Germany<br>(51) G05B 19/042<br>H04L 12/40<br>H04L 29/08<br>H04L 29/12<br>(11) EP3647888<br>(21) EP18203609.5<br>(47) 14.07.2021<br>(22) 31.10.2018<br>(54) CONTROL STRUCTURE AND METHOD FOR OPERATING THE SAME |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| (51) G05B 15/02<br>G05B 19/042<br>H04L 12/28<br>(11) EP3189382<br>(21) EP14771525.4<br>(47) 14.07.2021<br>(87) EP2014068847<br>10.03.2016<br>(22) 04.09.2014<br>(54) METHOD FOR DATA COLLECTION FOR THE CONFIGURATION OF A BUILDING AUTOMATION SYSTEM AND METHOD FOR CONFIGURING A BUILDING AUTOMATION SYSTEM<br>(73) Aizo Group AG<br>(72) VESPER, Martin<br>(51) G05B 19/042<br>(11) EP3465366<br>(21) EP17727435.4<br>(47) 07.07.2021<br>(87) US2017032644<br>07.12.2017<br>(22) 15.05.2017<br>(54) APPARATUS TO COMMUNICATIVELY COUPLE FIELD DEVICES TO A REMOTE TERMINAL UNIT<br>(73) Bristol, Inc., d/b/a Remote Automation Solutions<br>(72) VANDERAH, Richard J.<br>FINDLEY, Robert John<br>(31) 201615168827<br>(32) 31.05.2016<br>(33) United States of America<br>(51) G05B 19/042<br>(11) EP3410240<br>(21) EP17305625.0<br>(47) 07.07.2021<br>(22) 30.05.2017 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |



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| (21) EP16160679.3                            | (54) COMPUTER-IMPLEMENTED METHOD            | (87) EP2016053575                        |
| (47) 14.07.2021                              | AND SYSTEM FOR AUTOMATIC                    | 24.08.2017                               |
| (22) 16.03.2016                              | MONITORING AND STATUS                       | (22) 19.02.2016                          |
| (54) METHOD FOR MACHINING A                  | DETECTION OF ENTIRE PROCESS                 | (54) METHOD FOR GENERATING AN            |
| WORKPIECE IN A MACHINE TOOL                  | STAGES IN A PROCESS UNIT                    | ERROR REPORT                             |
| WITH OPTIMIZED PROCESSING TIME               | (73) Bayer Aktiengesellschaft               | (73) Siemens Energy Global GmbH & Co. KG |
| (73) Siemens Aktiengesellschaft              | (72) ROSS, Thomas                           | (72) LANG, Jörg                          |
| (72) Pitz, Thomas                            | (31) 13195897                               | SCHULZE, Marco                           |
| Spielmann, Ralf                              | (32) 05.12.2013                             | WIENERS-REHRMANN, Tobias                 |
| (51) G05B 19/4093                            | (33) European Patent Office (EPO)           | (51) G05D 1/00                           |
| B29C 64/00                                   | (51) G05B 19/418                            | B60W 30/09                               |
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| (21) EP18735645.6                            | H04L 9/32                                   | G05D 1/02                                |
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| (22) 23.05.2018                              | (21) EP17165452.8                           | (22) 22.01.2019                          |
| (54) DATA PROCESSING DEVICE FOR              | (47) 14.07.2021                             | (54) DYNAMICALLY ADJUSTABLE              |
| GENERATING MICROSTRUCTURES                   | (22) 07.04.2017                             | REFERENCE LINE SAMPLING POINT            |
| WITH ORTHOTROPIC ELASTIC                     | (54) DEVICE SPECIFIC CRYPTOGRAPHIC          | DENSITY FOR AUTONOMOUS                   |
| PROPERTIES                                   | CONTENT PROTECTION                          | VEHICLES                                 |
| (73) INRIA Institut National de Recherche en | (73) Rockwell Automation Technologies, Inc. | (73) Baidu USA LLC                       |
| Informatique et en Automatique               | (72) VISOKY, Jack Michael                   | (72) LI, Dong                            |
| (72) MARTINEZ, Jonas                         | FONNER, Kevin                               | ZHANG, Liangliang                        |
| LEFEBVRE, Sylvain                            | MOURZINE, Eugene                            | JIANG, Yifei                             |
| DUMAS, J r mie                               | (31) 201662322091 P                         | HU, Jiangtao                             |
| SONG, Haichuan                               | 201715457924                                | (31) 201815885569                        |
| (31) 1754866                                 | (32) 13.04.2016                             | (32) 31.01.2018                          |
| (32) 01.06.2017                              | 13.03.2017                                  | (33) United States of America            |
| (33) France                                  | (33) United States of America               | (51) G05D 1/00                           |
| (51) G05B 19/4097                            | United States of America                    | B60W 30/18                               |
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| (47) 07.07.2021                              | (21) EP16196886.2                           | (47) 07.07.2021                          |
| (87) IB2017051815                            | (47) 14.07.2021                             | (87) US2017028248                        |
| 30.11.2017                                   | (22) 02.11.2016                             | 09.11.2017                               |
| (22) 30.03.2017                              | (54) AN EVENT ANALYSIS APPARATUS, AN        | (22) 19.04.2017                          |
| (54) METHOD OF MAKING A COUNTER-             | EVENT ANALYSIS METHOD, AND AN               | (54) AUTOMATED VEHICLE OPERATING         |
| DIE CUTTER, ADAPTING UNIT FOR                | EVENT ANALYSIS PROGRAM                      | SYSTEM WITH DRIVING-RULE                 |
| A MILLING MACHINE AND MILLING                | (73) Yokogawa Electric Corporation          | MODIFICATION BASED ON                    |
| MACHINE COMPRISING THIS UNIT                 | (72) Liu, Zhuo                              | OBSERVATION OF ANOTHER                   |
| (73) Pro Form S.r.l.                         | Sakuraba, Yuichi                            | VEHICLE                                  |
| (72) FOPPA PEDERETTI, Franco                 | (31) 2015218893                             | (73) Motional AD LLC                     |
| (31) UA20163721                              | (32) 06.11.2015                             | (72) WEI, Junqing                        |
| (32) 24.05.2016                              | (33) Japan                                  | XU, Wenda                                |
| (33) Italy                                   | (51) G05B 23/02                             | SNIDER, Jarrod, M.                       |
| (51) G05B 19/414                             | (11) EP3762797                              | LEE, Jong, Ho                            |
| (11) EP3264207                               | (21) EP19715496.6                           | (31) 201615146534                        |
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| (22) 25.11.2016                              | 17.10.2019                                  | (51) G05D 1/00                           |
| (54) SERVO ACTUATOR AND SERVO                | (22) 10.04.2019                             | G08G 1/0965                              |
| CONTROLLING SYSTEM                           | (54) METHOD AND SYSTEM FOR                  | (11) EP3298465                           |
| (73) UBTech Robotics Corp Ltd                | MANAGING A TECHNICAL                        | (21) EP16724327.8                        |
| (72) XIONG, Youjun                           | INSTALLATION                                | (47) 07.07.2021                          |
| HUANG, Tingshuang                            | (73) Siemens Aktiengesellschaft             | (87) EP2016060417                        |
| (31) 201610514818                            | (72) RAMAKRISHNARAJA, Prithvi Raj           | 24.11.2016                               |
| (32) 30.06.2016                              | KAMBOJ, Vineet                              | (22) 10.05.2016                          |
| (33) China                                   | MEHROTRA, Siddharth                         | (54) HIGHLY AUTOMATED CONTROL OF A       |
| (51) G05B 19/418                             | (31) 18166571                               | MOTOR VEHICLE                            |
| G05B 23/02                                   | (32) 10.04.2018                             | (73) Robert Bosch GmbH                   |
| (11) EP3077878                               | (33) European Patent Office (EPO)           | (72) NORDBRUCH, Stefan                   |
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| 15.03.2018                          | LIQUID AND GASEOUS MEDIA               | (21) EP18160329.1                   |
| (22) 14.07.2017                     | (73) Röchling Medical Waldachtal AG    | (47) 14.07.2021                     |
| (54) SYSTEM AND METHOD FOR GUIDING  | (72) SCHÖNBERGER, Markus               | (22) 06.03.2018                     |
| A VEHICLE                           | PACO, José                             | (54) ASYNCHRONOUS LOW DROPOUT       |
| (73) SEW-EURODRIVE GmbH & Co. KG    | NAFZ, Joachim                          | REGULATOR                           |
| (72) SCHMIDT, Josef                 | KALLFASS, Jochen                       | (73) MediaTek Inc.                  |
| BÖCKLE, Jürgen                      | ORTEL, Carsten                         | (72) Kung, Nien-Hui                 |
| HUA, Zhidong                        | (31) 202017004695 U                    | Chou, Chia-Hua                      |
| SCHÄFER, Thomas                     | (32) 08.09.2017                        | Hsu, Yen-Hsun                       |
| WANJEK, Andreas                     | (33) Germany                           | (31) 201762468425 P                 |
| (31) 102016010879                   | (51) G05D 16/10                        | 201762468427 P                      |
| (32) 12.09.2016                     | (11) EP3637215                         | 201815907225                        |
| (33) Germany                        | (21) EP18315032.5                      | (32) 08.03.2017                     |
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| (11) EP3499333                      | (22) 08.10.2018                        | 27.02.2018                          |
| (21) EP18193413.4                   | (54) DISCHARGE VALVE FOR A FIRE        | (33) United States of America       |
| (47) 14.07.2021                     | EXTINGUISHING SYSTEM                   | United States of America            |
| (22) 10.09.2018                     | (73) EXTINGUISHING                     | United States of America            |
| (54) DRIVERLESS TRANSPORT SYSTEM    | (72) Pozo Pinilla, Alfonso             | (51) G05F 1/67                      |
| AND METHOD FOR OPERATING SAME       | (51) G05D 16/16                        | H02J 1/00                           |
| (73) AUDI AG                        | (11) EP3441843                         | H02J 1/10                           |
| (72) Gensberger, Thomas             | (21) EP18201043.9                      | H02J 3/38                           |
| Jakob, Thomas                       | (47) 14.07.2021                        | H02J 7/35                           |
| (31) 102017011694                   | (22) 17.10.2018                        | H02M 1/00                           |
| (32) 18.12.2017                     | (54) GAS PRESSURE CONTROLLER,          | H02M 3/158                          |
| (33) Germany                        | VALVE ASSEMBLY AND METHOD              | H02M 7/17                           |
| (51) G05D 1/12                      | OF ASSEMBLING A GAS PRESSURE           | (11) EP3619783                      |
| (11) EP3273318                      | CONTROLLER                             | (21) EP18719587.0                   |
| (21) EP17182150.7                   | (73) Wigersma en Sikkema B.V.          | (47) 07.07.2021                     |
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| (22) 19.07.2017                     | (31) 2021402                           | 08.11.2018                          |
| (54) AUTONOMOUS SYSTEM FOR          | (32) 27.07.2018                        | (22) 01.05.2018                     |
| COLLECTING MOVING IMAGES            | (33) Netherlands                       | (54) POWER CONVERSION SYSTEM AND    |
| BY A DRONE WITH TARGET              | (51) G05F 1/24                         | METHOD                              |
| TRACKING AND IMPROVED TARGET        | H02H 7/12                              | (73) Signify Holding B.V.           |
| POSITIONING                         | H02H 7/122                             | (72) MAJI, Goutam                   |
| (73) Parrot Drones                  | H02M 3/155                             | MISHRA, Priya, Ranjan               |
| (72) CHEVALLEY, Laure               | H02M 3/158                             | (31) 201741015917                   |
| LEURENT, Edouard                    | H02M 1/32                              | 17188962                            |
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| (33) France                         | (47) 07.07.2021                        | (33) India                          |
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| (21) EP16725081.0                   | OF CONTROLLING POWER                   | (11) EP3217246                      |
| (47) 14.07.2021                     | CONVERTERS                             | (21) EP17151123.1                   |
| (87) EP2016061199                   | (73) Hamilton Sundstrand Corporation   | (47) 07.07.2021                     |
| 24.11.2016                          | (72) HOYT, David S.                    | (22) 12.01.2017                     |
| (22) 19.05.2016                     | (31) 201514699212                      | (54) REFERENCE VOLTAGE CIRCUIT      |
| (54) FLOW CONTROL DEVICE AND MIXING | (32) 29.04.2015                        | (73) Nuvoton Technology Corporation |
| SYSTEM COMPRISING SUCH A            | (33) United States of America          | (72) Tseng, Te-Ming                 |
| DEVICE                              | (51) G05F 1/44                         | Hsu, Wei-Chan                       |
| (73) Exel Industries                | H02J 9/06                              | Hung, Yeh-Tai                       |
| (72) SPICA, Maxime                  | H02M 5/458                             | Li, Wen-Yi                          |
| BARON, Sébastien                    | (11) EP3661011                         | (31) 105100761                      |
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| (32) 19.05.2015                     | (47) 07.07.2021                        | (33) Taiwan, Province of China      |
| (33) France                         | (22) 15.11.2019                        | (51) G06F 1/16                      |
| (51) G05D 16/06                     | (54) 3 PHASE UPS BUS BALANCER          | (11) EP3428773                      |
| G05D 16/10                          | (73) Schneider Electric IT Corporation | (21) EP18189857.8                   |
| (11) EP3679446                      | (72) MOURIDSEN, Jonas Sonsby           | (47) 07.07.2021                     |
|                                     | TINGSKOV, Carsten Nommensen            | (22) 31.08.2016                     |

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| (72) WAGMAN, Daniel C.                   | (87) 04.02.2016                                                                                |                   |
| ROSS, Oliver C.                          | (22) 28.07.2014                                                                                |                   |
| JOL, Eric S.                             | (54) DOCKING STATION WITH ROTATABLE MULTI-PLUG CONNECTOR                                       |                   |
| ESMAEILI, Hiva                           | (73) Hewlett-Packard Development Company, L.P.                                                 |                   |
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| (51) G06F 1/16                           | (47) 14.07.2021                                                                                |                   |
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| (87) US2018019612                        | (54) DATA CENTER MANAGEMENT                                                                    |                   |
| 07.09.2018                               | (73) Vapor Io Inc.                                                                             |                   |
| (22) 26.02.2018                          | (72) CENCINI, Andrew, Brian                                                                    |                   |
| (54) DISPLAY DEVICE                      | WHITE, Steven                                                                                  |                   |
| (73) Microsoft Technology Licensing, LLC | CRAWFORD, Colton, Malone                                                                       |                   |
| (72) DIGHDE, Rajesh Manohar              | (31) 201662275909 P                                                                            |                   |
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| G06F 1/20                                | (47) 07.07.2021                                                                                |                   |
| H04M 1/02                                | (22) 04.12.2019                                                                                |                   |
| H04M 1/03                                | (54) MOBILE PHONE COMPRISING MASTER AND SLAVE PORTIONS.                                        |                   |
| H05K 7/20                                | (73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.                                      |                   |
| (11) EP3544267                           | (72) LI, Jie                                                                                   |                   |
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| (54) MOBILE TERMINAL                     | (21) EP11782700.6                                                                              |                   |
| (73) LG Electronics Inc.                 | (47) 07.07.2021                                                                                |                   |
| (72) LEE, Yongho                         | (87) US2011057640                                                                              |                   |
| LEE, Youngmin                            | 03.05.2012                                                                                     |                   |
| KIM, Gihwan                              | (22) 25.10.2011                                                                                |                   |
| (51) G06F 1/16                           | (54) METHOD AND APPARATUS FOR THERMAL CONTROL OF PROCESSING NODES                              |                   |
| G06F 1/32                                | (73) Advanced Micro Devices, Inc.                                                              |                   |
| G06F 1/3203                              | (72) BRANOVER, Alexander                                                                       |                   |
| G06F 1/3206                              | NAFFZIGER, Samuel, D.                                                                          |                   |
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| (22) 20.11.2015                          |                                                                                                |                   |
|                                          | (54) SYSTEM AND METHOD FOR PEAK DYNAMIC POWER MANAGEMENT IN A PORTABLE COMPUTING DEVICE        |                   |
|                                          | (73) Qualcomm Incorporated                                                                     |                   |
|                                          | (72) PARK, Hee Jun                                                                             |                   |
|                                          | AGASHE, Parag Arun                                                                             |                   |
|                                          | TAMJIDI, Mohammad                                                                              |                   |
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|                                          | (47) 07.07.2021                                                                                |                   |
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|                                          | (22) 26.10.2015                                                                                |                   |
|                                          | (54) ELECTRONIC DEVICE                                                                         |                   |
|                                          | (73) LG Electronics Inc.                                                                       |                   |
|                                          | (72) LEE, Taegyun                                                                              |                   |
|                                          | LEE, Junhyung                                                                                  |                   |
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|                                          | (22) 12.09.2013                                                                                |                   |
|                                          | (54) FOLDABLE TOUCH SENSOR ASSEMBLY                                                            |                   |
|                                          | (73) Future Tech Capital LLC                                                                   |                   |
|                                          | (72) PETCAVICH, Robert J.                                                                      |                   |
|                                          | KILLION, Reed J.                                                                               |                   |
|                                          | (31) 201261701327 P                                                                            |                   |
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|                                          | (47) 14.07.2021                                                                                |                   |
|                                          | (22) 20.02.2014                                                                                |                   |
|                                          | (54) Apparatus and method for controlling a display based on a manner of holding the apparatus |                   |
|                                          | (73) Sony Corporation                                                                          |                   |
|                                          | (72) TOKUTAKE, Kenji                                                                           |                   |
|                                          | (31) 201314135649                                                                              |                   |
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| (54) POWER SUPPLY                    | (22) 01.02.2018                       | (22) 19.05.2016                     |
| (73) LISTAN GmbH & Co. KG            | (54) SYSTEM FOR DETECTING             | (54) TECHNIQUES FOR SIMULATED       |
| (72) Minkin, Stanislav               | AND MONITORING POWER                  | PHYSICAL INTERACTION BETWEEN        |
| Rex, Christian-Michael               | CHARACTERISTICS AMONGST               | USERS VIA THEIR MOBILE              |
| (51) G06F 1/20                       | CONNECTED DEVICES IN A                | COMPUTING DEVICES                   |
| H01L 23/373                          | CONFERENCING SYSTEM                   | (73) Google LLC                     |
| H01L 23/42                           | (73) Shure Acquisition Holdings, Inc. | (72) SILLS, Maxwell Andrew          |
| H01L 23/427                          | (72) OAKLEY, William, J.              | (31) 201514724924                   |
| (11) EP2972651                       | IVERSEN, Michael                      | (32) 29.05.2015                     |
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| (22) 14.03.2014                      | (51) G06F 1/30                        | (47) 07.07.2021                     |
| (54) ELECTRONIC DEVICES ASSEMBLED    | H03K 17/24                            | (87) EP2016082905                   |
| WITH HEAT ABSORBING AND/             | (11) EP3300254                        | 06.07.2017                          |
| OR THERMALLY INSULATING              | (21) EP16190703.5                     | (22) 30.12.2016                     |
| COMPOSITION                          | (47) 07.07.2021                       | (54) INTELLIGENT SMART ROOM         |
| (73) Henkel IP & Holding GmbH        | (22) 26.09.2016                       | CONTROL SYSTEM                      |
| (72) NGUYEN, My N.                   | (54) CONTROL CIRCUIT FOR SOLID STATE  | (73) Robert Bosch GmbH              |
| BRANDI, Jason                        | POWER CONTROLLER                      | (72) YE, Mao                        |
| BARRIAU, Emilie                      | (73) HS Elektronik Systeme GmbH       | CHEN, Yen-Lin                       |
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| (22) 08.05.2015                      | 20.06.2019                            | (54) HYBRID REALITY BASED OBJECT    |
| (54) FUNCTIONAL CHECK OF POWER       | (22) 29.11.2018                       | INTERACTION AND CONTROL             |
| SUPPLY UNITS                         | (54) ULTRA-LOW POWER MODE FOR A       | (73) Tata Consultancy Services Ltd. |
| (73) Eaton Intelligent Power Limited | LOW-COST FORCE-SENSING DEVICE         | (72) TOMMY, Robin                   |
| (72) KIA, Emilien                    | (73) Google LLC                       | JOSE, Hima                          |
| QUETTE, Arnaud                       | (72) MUKHERJEE, Debanjan              | JOHRI, Vansh                        |
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| H02H 3/20                            | G06F 3/16                             | (21) EP17798224.6                   |
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| (22) 30.06.2017                      | (47) 14.07.2021                       | (22) 16.11.2017                     |
| (54) METHOD FOR PROVIDING ELECTRIC   | (87) KR2016009694                     | (54) WEARABLE MOTION TRACKING       |
| POWER TO AN INTERFACE CARD           | 22.06.2017                            | SYSTEM                              |
| AND SAFE STATE CONTROLLER            | (22) 31.08.2016                       | (73) Sensoryx AG                    |
| (73) duagon AG                       | (54) ELECTRONIC DEVICE AND CRADLE     | (72) RANIERI, Nicola                |
| (72) Nair, Ragesh                    | THEREOF                               | ADELSBERGER, Rolf                   |
| Knaus, Marco                         | (73) Samsung Electronics Co., Ltd.    | WENNER, Fabian                      |
| Ratajski, Michal                     | (72) LEE, So Hee                      | SEIFERT, Hagen                      |
| Leuenberger, David                   | SHIN, Won Ho                          | (31) 16200754                       |
| Robert, Marc                         | ROH, Kyung Shik                       | (32) 25.11.2016                     |
| (51) G06F 1/26                       | PARK, Soon Yong                       | (33) European Patent Office (EPO)   |
| G06F 13/42                           | PARK, Joong Kyung                     | (51) G06F 3/01                      |
| H04B 3/44                            | YOON, Suk June                        | G06F 3/03                           |
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| H04L 12/26                           | (32) 15.12.2015                       | (11) EP3635513                      |
| H04L 12/40                           | (33) Korea (Republic)                 | (21) EP18728483.1                   |
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| (54) SELECTIVE DETECTION OF VISUAL<br>CUES FOR AUTOMATED ASSISTANTS                                                   | (73) Facebook Technologies, LLC                                                      | (11) EP3667473                                                                                              |
| (73) Google LLC                                                                                                       | (72) TRAIL, Nicholas Daniel                                                          | (21) EP20154656.1                                                                                           |
| (72) MIXTER, Kenneth                                                                                                  | (31) 201562268488 P                                                                  | (47) 14.07.2021                                                                                             |
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| NGUYEN, Tuan                                                                                                          | (32) 16.12.2015                                                                      | (54) SYSTEM AND METHOD FOR MULTI-<br>MODE COMMAND INPUT                                                     |
| (51) G06F 3/01                                                                                                        | 08.12.2016                                                                           | (73) Universal Electronics, Inc.                                                                            |
| G06F 3/03                                                                                                             | (33) United States of America                                                        | (72) HATAMBEIKI, Arsham                                                                                     |
| H04L 29/06                                                                                                            | United States of America                                                             | KOHANEK, Jeffrey                                                                                            |
| G06F 21/31                                                                                                            | (51) G06F 3/01                                                                       | KEILES, Pamela E                                                                                            |
| G06F 21/32                                                                                                            | G06F 9/451                                                                           | (31) 64503709                                                                                               |
| G06F 21/64                                                                                                            | G06N 20/00                                                                           | (32) 22.12.2009                                                                                             |
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| 04.02.2016                                                                                                            | (22) 16.05.2017                                                                      | (47) 14.07.2021                                                                                             |
| (22) 09.05.2015                                                                                                       | (54) TAILORING USER INTERFACE                                                        | (22) 25.02.2014                                                                                             |
| (54) SYSTEMS AND METHODS FOR<br>BIOMECHANICALLY-BASED EYE<br>SIGNALS FOR INTERACTING WITH<br>REAL AND VIRTUAL OBJECTS | PRESENTATIONS BASED ON USER<br>STATE                                                 | (54) Image processing apparatus, image<br>processing system, image processing<br>method, and carrier medium |
| (73) Google LLC                                                                                                       | (73) Microsoft Technology Licensing, LLC                                             | (73) Ricoh Company, Ltd.                                                                                    |
| (72) PUBLICOVER, Nelson, George                                                                                       | (72) GORDON, John C.                                                                 | (72) Kemmochi, Eiji                                                                                         |
| MARGGRAFF, Lewis, James                                                                                               | SHAHID, Khuram                                                                       | Shimada, Atsuo                                                                                              |
| DRAKE, Eliot                                                                                                          | (31) 201615167667                                                                    | (31) 2013040756                                                                                             |
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| 201462074927 P                                                                                                        | (22) 18.05.2018                                                                      | (22) 16.08.2013                                                                                             |
| (32) 09.05.2014                                                                                                       | (54) METHOD FOR OPERATING A VIRTUAL<br>REALITY SYSTEM, AND VIRTUAL<br>REALITY SYSTEM | (54) In-cell touch panel                                                                                    |
| 13.07.2014                                                                                                            | (73) Audi AG                                                                         | (73) Beijing BOE Optoelectronics Technology<br>Co., Ltd.                                                    |
| 22.07.2014                                                                                                            | (72) KÜHNE, Marcus                                                                   | (72) Wang, Haisheng                                                                                         |
| 22.07.2014                                                                                                            | (31) 102017208936                                                                    | Dong, Xue                                                                                                   |
| 19.08.2014                                                                                                            | (32) 29.05.2017                                                                      | Li, Cheng                                                                                                   |
| 19.08.2014                                                                                                            | (33) Germany                                                                         | Ding, Xiaoliang                                                                                             |
| 04.09.2014                                                                                                            | (51) G06F 3/01                                                                       | Liu, Hongjuan                                                                                               |
| 04.11.2014                                                                                                            | G08B 6/00                                                                            | Yang, Shengji                                                                                               |
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| (33) United States of America                                                                                         | A63F 13/285                                                                          | Liu, Yingming                                                                                               |
| United States of America                                                                                              | (11) EP3550407                                                                       | Ren, Tao                                                                                                    |
| United States of America                                                                                              | (21) EP19177139.3                                                                    | (31) 201210295723                                                                                           |
| United States of America                                                                                              | (47) 07.07.2021                                                                      | (32) 17.08.2012                                                                                             |
| United States of America                                                                                              | (22) 14.11.2014                                                                      | (33) China                                                                                                  |
| United States of America                                                                                              | (54) MAGNETIC APPARATUS FOR<br>PROVIDING TACTILE SENSATION                           | (51) G06F 3/041                                                                                             |
| United States of America                                                                                              | (73) CK Materials Lab Co., Ltd.                                                      | G06F 3/044                                                                                                  |
| United States of America                                                                                              | (72) DO, Seoung Hun                                                                  | (11) EP2904478                                                                                              |
| United States of America                                                                                              | KIM, Hyeong Jun                                                                      | (21) EP13774494.2                                                                                           |
| United States of America                                                                                              | (31) 20140133508                                                                     | (47) 07.07.2021                                                                                             |
| United States of America                                                                                              | 20140158038                                                                          | (87) GB2013052614                                                                                           |
| (51) G06F 3/01                                                                                                        | (32) 02.10.2014                                                                      | 17.04.2014                                                                                                  |
| G06F 3/03                                                                                                             | 13.11.2014                                                                           | (22) 08.10.2013                                                                                             |
| H04N 13/254                                                                                                           | (33) Korea (Republic)                                                                | (54) TOUCH SENSORS AND TOUCH<br>SENSING METHODS                                                             |
| G01S 17/18                                                                                                            | Korea (Republic)                                                                     | (73) Touchnetix Limited                                                                                     |
| G01S 17/89                                                                                                            | (51) G06F 3/02                                                                       | (72) ROBERTS, Stephen William                                                                               |
| (11) EP3391648                                                                                                        | G06F 3/041                                                                           | SLEEMAN, Peter Timothy                                                                                      |
| (21) EP16876429.8                                                                                                     | G06F 3/044                                                                           | ARD, Christopher Kyle                                                                                       |
| (47) 07.07.2021                                                                                                       | H01H 9/02                                                                            | (31) 201217948                                                                                              |
| (87) US2016065985                                                                                                     |                                                                                      |                                                                                                             |
| 22.06.2017                                                                                                            |                                                                                      |                                                                                                             |

|                                                |                                     |                                           |
|------------------------------------------------|-------------------------------------|-------------------------------------------|
| (32) 08.10.2012                                | 07.10.2011                          | G06F 3/046                                |
| (33) United Kingdom                            | 05.01.2012                          | (11) EP3126938                            |
| (51) G06F 3/041                                | (33) United States of America       | (21) EP14888412.5                         |
| G06F 3/044                                     | United States of America            | (47) 07.07.2021                           |
| (11) EP3141990                                 | United States of America            | (87) KR2014009657                         |
| (21) EP16192537.5                              | United States of America            | 08.10.2015                                |
| (47) 07.07.2021                                | United States of America            | (22) 15.10.2014                           |
| (22) 07.07.2016                                | United States of America            | (54) TOUCH PANEL FOR IMPROVING            |
| (54) THRESHOLD ADAPTATION FOR A                | United States of America            | CROSS STRUCTURE OF SENSING                |
| MULTI-TOUCH INPUT DEVICE                       | United States of America            | PATTERN                                   |
| (73) Alps Alpine Co., Ltd.                     | United States of America            | (73) LG Innotek Co., Ltd.                 |
| (72) Nakajima, Satoshi                         | (51) G06F 3/041                     | (72) OEM, Seongsu                         |
| Hayasaka, Satoshi                              | G06T 7/136                          | YOU, Young Sun                            |
| Miyagawa, Hayato                               | G06T 7/73                           | LEE, Sun Hwa                              |
| Kitagawa, Kohei                                | (11) EP3105664                      | JIN, Kwang Yong                           |
| (31) 2015137724                                | (21) EP15748667.1                   | CHOI, Yongjae                             |
| (32) 09.07.2015                                | (47) 07.07.2021                     | (31) 20140038133                          |
| (33) Japan                                     | (87) US2015014581                   | (32) 31.03.2014                           |
| (51) G06F 3/041                                | 20.08.2015                          | (33) Korea (Republic)                     |
| G06F 3/048                                     | (22) 05.02.2015                     | (51) G06F 3/044                           |
| G06F 3/0482                                    | (54) DETERMINING PITCH AND YAW FOR  | G06K 9/00                                 |
| G06F 3/0488                                    | TOUCHSCREEN INTERACTIONS            | (11) EP3239894                            |
| (11) EP3651007                                 | (73) Qeexo, Co.                     | (21) EP15899455.8                         |
| (21) EP19192800.1                              | (72) HARRISON, Christopher          | (47) 14.07.2021                           |
| (47) 14.07.2021                                | SCHWARZ, Julia                      | (87) CN2015094639                         |
| (22) 22.09.2015                                | XIAO, Robert Bo                     | 02.02.2017                                |
| (54) METHOD, APPARATUS, AND DEVICE             | (31) 201461939069 P                 | (22) 16.11.2015                           |
| FOR ENABLING TASK MANAGEMENT                   | (32) 12.02.2014                     | (54) FINGERPRINT DETECTION CIRCUIT        |
| INTERFACE                                      | (33) United States of America       | AND FINGERPRINT RECOGNITION               |
| (73) Huawei Technologies Co., Ltd.             | (51) G06F 3/042                     | SYSTEM                                    |
| (72) HUANG, Jiejing                            | G06F 3/0346                         | (73) Shenzhen Goodix Technology Co., Ltd. |
| WU, Huangwei                                   | G06F 3/0354                         | (72) ZHAN, Chang                          |
| HUANG, Xi                                      | (11) EP3015961                      | (31) 201510444445                         |
| (31) PCT/CN2015/076466                         | (21) EP14817801.5                   | (32) 24.07.2015                           |
| (32) 13.04.2015                                | (47) 14.07.2021                     | (33) China                                |
| (33) World Intellectual Property Office (WIPO) | (87) JP2014059530                   | (51) G06F 3/0481                          |
| (51) G06F 3/041                                | 31.12.2014                          | G06F 3/0483                               |
| G06F 3/14                                      | (22) 31.03.2014                     | (11) EP2564300                            |
| H04L 29/06                                     | (54) INFORMATION PROCESSING DEVICE, | (21) EP11775533.0                         |
| H04W 28/18                                     | CONTROL METHOD, PROGRAM, AND        | (47) 07.07.2021                           |
| H04W 99/00                                     | STORAGE MEDIUM                      | (87) US2011034181                         |
| (11) EP3661262                                 | (73) Sony Corporation               | 03.11.2011                                |
| (21) EP20153127.4                              | (72) NARITA, Tomoya                 | (22) 27.04.2011                           |
| (47) 14.07.2021                                | INOUE, Taku                         | (54) CUSTOM TAB ORDERING AND              |
| (22) 20.01.2012                                | HAGIWARA, Takehiro                  | REPLACEMENT                               |
| (54) USER INPUT BACK CHANNEL FOR               | (31) 2013133891                     | (73) Microsoft Technology Licensing, LLC  |
| WIRELESS DISPLAYS                              | (32) 26.06.2013                     | (72) CRUZ MORENO, Radames Saul            |
| (73) QUALCOMM Incorporated                     | (33) Japan                          | COLLIER, Adrian Michael                   |
| (72) HUANG, Xiaolong                           | (51) G06F 3/044                     | SIDDHARTHA, Pradyumna                     |
| RAVEENDRAN, Vijayalakshmi R.                   | (11) EP3410279                      | (31) 832692                               |
| WANG, Xiadong                                  | (21) EP17210232.9                   | 330202 P                                  |
| SHAUKAT, Fawad                                 | (47) 07.07.2021                     | (32) 08.07.2010                           |
| (31) 201161435194 P                            | (22) 22.12.2017                     | 30.04.2010                                |
| 201161447592 P                                 | (54) SENSING UNIT INCLUDING TOUCH   | (33) United States of America             |
| 201161448312 P                                 | ELECTRODE, AND DISPLAY DEVICE       | United States of America                  |
| 201161450101 P                                 | USING THE SAME                      | (51) G06F 3/0481                          |
| 201161467535 P                                 | (73) LG Display Co., Ltd.           | G06F 3/0487                               |
| 201161467543 P                                 | (72) LEE, Yangsik                   | G06F 8/38                                 |
| 201161514863 P                                 | HWANG, KwangJo                      | G06F 9/451                                |
| 201161544470 P                                 | JUNG, JiHyun                        | (11) EP3602286                            |
| 201213344253                                   | LEE, DeukSu                         | (21) EP18762666.8                         |
| (32) 21.01.2011                                | AN, SuChang                         | (47) 14.07.2021                           |
| 28.02.2011                                     | LEE, JaeGyun                        | (87) US2018045167                         |
| 02.03.2011                                     | RHE, Ruda                           | 14.02.2019                                |
| 07.03.2011                                     | (31) 20170068431                    | (22) 03.08.2018                           |
| 25.03.2011                                     | (32) 01.06.2017                     | (54) DYNAMICALLY ADAPTING PANELS OF       |
| 25.03.2011                                     | (33) Korea (Republic)               | A USER INTERFACE                          |
| 03.08.2011                                     | (51) G06F 3/044                     | (73) Google LLC                           |

|                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (72) MURPHY, David Joseph<br>KU, Wing Hang Calvin<br>SEELEY, Damon<br>KEELY, Lee B.<br>GARDNER III, Alan Lee                                                                                                                                                                                | United States of America<br>United States of America                                                                                                                                                                                                                                     | (31) 2016087307<br>(32) 25.04.2016<br>(33) Japan                                                                                                                                                                                                |
| (31) 201715673082<br>(32) 09.08.2017<br>(33) United States of America                                                                                                                                                                                                                       | (51) G06F 3/06<br>G06F 9/50<br>G06F 12/14<br>G06F 12/16<br>H04L 29/06<br>G06F 21/50<br>G06F 21/71                                                                                                                                                                                        | (51) G06F 3/06<br>H04L 9/08<br>H04L 9/30<br>H04L 9/32<br>G06F 16/174                                                                                                                                                                            |
| (51) G06F 3/0488<br>(11) EP3635527<br>(21) EP18732193.0<br>(47) 07.07.2021<br>(87) US2018033569<br>13.12.2018<br>(22) 21.05.2018<br>(54) MAGNIFIED INPUT PANELS<br>(73) Microsoft Technology Licensing, LLC                                                                                 | (11) EP3345095<br>(21) EP16842830.8<br>(47) 07.07.2021<br>(87) US2016049523<br>09.03.2017<br>(22) 30.08.2016<br>(54) HACKING-RESISTANT COMPUTER<br>DESIGN                                                                                                                                | (11) EP3235163<br>(21) EP14908187.9<br>(47) 14.07.2021<br>(87) CN2014094189<br>23.06.2016<br>(22) 18.12.2014<br>(54) DE-DUPLICATION OF ENCRYPTED<br>DATA                                                                                        |
| (72) MARKIEWICZ, Jan-Kristian<br>DISANO, Robert J.<br>WYGONIK, Gregg R.<br>MCCORMACK, Michael D.<br>KLEIN, Christian                                                                                                                                                                        | (73) PathGuard, LLC<br>(72) NEWMAN, Frank, N.<br>NEWMAN, Dan                                                                                                                                                                                                                             | (73) Nokia Technologies Oy<br>(72) YAN, Zheng                                                                                                                                                                                                   |
| (31) 201715616708<br>(32) 07.06.2017<br>(33) United States of America                                                                                                                                                                                                                       | (31) 201514841469<br>(32) 31.08.2015<br>(33) United States of America                                                                                                                                                                                                                    | (51) G06F 3/08<br>G06F 11/10<br>G06F 11/14<br>G06F 12/00<br>G06F 12/16<br>G06F 16/13                                                                                                                                                            |
| (51) G06F 3/0488<br>(11) EP3374850<br>(21) EP16784187.3<br>(47) 14.07.2021<br>(87) EP2016075095<br>18.05.2017<br>(22) 19.10.2016<br>(54) KEYBOARD APPLICATION FOR<br>DEVICE ACCESS SOFTWARE                                                                                                 | (11) EP3121730<br>(21) EP15190795.3<br>(47) 14.07.2021<br>(22) 21.10.2015<br>(54) MEMORY SYSTEM FOR<br>CONTROLLING NONVOLATILE<br>MEMORY                                                                                                                                                 | (11) EP2261803<br>(21) EP09728228.9<br>(47) 07.07.2021<br>(87) JP2009001535<br>08.10.2009<br>(22) 01.04.2009<br>(54) ACCESS DEVICE, INFORMATION<br>RECORDING DEVICE, INFORMATION<br>RECORDING SYSTEM, FILE<br>MANAGEMENT METHOD, AND<br>PROGRAM |
| (73) Endress+Hauser Process Solutions AG<br>(72) MAYER, Michael<br>LUBER, Werner<br>SOTRIFFER, Ingomar                                                                                                                                                                                      | (73) TOSHIBA MEMORY CORPORATION<br>(72) Kanno, Shinichi<br>(31) 2015145712<br>(32) 23.07.2015<br>(33) Japan                                                                                                                                                                              | (73) Panasonic Corporation<br>(72) MAEDA, Takuji<br>INOUE, Shinji                                                                                                                                                                               |
| (31) 102015119609<br>(32) 13.11.2015<br>(33) Germany                                                                                                                                                                                                                                        | (51) G06F 3/06<br>G06F 12/02<br>G06F 16/17<br>(11) EP3293625<br>(21) EP15892912.5<br>(47) 07.07.2021<br>(87) CN2015079894<br>01.12.2016<br>(22) 27.05.2015<br>(54) METHOD AND DEVICE FOR<br>ACCESSING FILE, AND STORAGE<br>SYSTEM                                                        | (31) 2008097724<br>(32) 04.04.2008<br>(33) Japan                                                                                                                                                                                                |
| (51) G06F 3/06<br>G06F 3/16<br>G06F 13/38<br>G06F 13/42<br>H04J 3/06<br>H04L 7/00<br>H04L 12/403<br>(11) EP3476084<br>(21) EP17737134.1<br>(47) 14.07.2021<br>(87) US2017039198<br>04.01.2018<br>(22) 26.06.2017<br>(54) SYSTEMS AND METHODS FOR<br>CONTROLLING ISOCHRONOUS DATA<br>STREAMS | (21) EP15892912.5<br>(47) 07.07.2021<br>(87) CN2015079894<br>01.12.2016<br>(22) 27.05.2015<br>(54) METHOD AND DEVICE FOR<br>ACCESSING FILE, AND STORAGE<br>SYSTEM<br>(73) Honor Device Co., Ltd.<br>(72) SHI, Guojun<br>LI, Zhigang<br>XIAO, Fuzhou                                      | (51) G06F 3/12<br>(11) EP3531270<br>(21) EP19158286.5<br>(47) 07.07.2021<br>(22) 20.02.2019<br>(54) PRINTING DATA GENERATION<br>DEVICE, PRINTING DATA<br>GENERATION METHOD, STORAGE<br>MEDIUM, AND PRINTING DATA<br>GENERATION PROGRAM          |
| (73) QUALCOMM INCORPORATED<br>(72) YU, Andy<br>CHEUNG, Andrew<br>KULKARNI, Ameya                                                                                                                                                                                                            | (73) SCREEN Holdings Co., Ltd.<br>(72) IZAWA, Yo<br>KATO, Takako<br>ONOGAWA, Yoshihiko                                                                                                                                                                                                   | (73) SCREEN Holdings Co., Ltd.<br>(72) IZAWA, Yo<br>KATO, Takako<br>ONOGAWA, Yoshihiko                                                                                                                                                          |
| (31) 201662355166 P<br>201762517247 P<br>201715631807<br>(32) 27.06.2016<br>09.06.2017<br>23.06.2017<br>(33) United States of America                                                                                                                                                       | (51) G06F 3/06<br>G06F 21/55<br>G06F 21/60<br>G06F 21/71<br>G06F 21/74<br>G06F 21/85<br>(11) EP3451220<br>(21) EP17789420.1<br>(47) 14.07.2021<br>(87) JP2017016004<br>02.11.2017<br>(22) 21.04.2017<br>(54) ERASING DEVICE<br>(73) Yokogawa Electric Corporation<br>(72) ARAI, Takayuki | (31) 2018029504<br>(32) 22.02.2018<br>(33) Japan                                                                                                                                                                                                |
|                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                          | (51) G06F 3/12<br>G06F 13/10<br>H04L 12/24<br>H04L 12/58<br>H04L 29/08<br>H04N 1/00<br>G06F 8/61<br>G06F 9/4401<br>G06F 9/445<br>(11) EP3411784                                                                                                 |

|                                           |                                             |                                          |
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| (21) EP17748293.2                         | (73) Guangzhou Shirui Electronics Co., Ltd. | G09G 5/00                                |
| (47) 07.07.2021                           | (72) FU, Yulin                              | (11) EP3663903                           |
| (87) US2017016554                         | (31) 201610269812                           | (21) EP17922524.8                        |
| 10.08.2017                                | (32) 25.04.2016                             | (47) 14.07.2021                          |
| (22) 03.02.2017                           | (33) China                                  | (87) CN2017098683                        |
| (54) SOFTWARE-AS-A-SERVICE                | (51) G06F 3/14                              | 28.02.2019                               |
| DEPLOYMENT OF PRINTER DRIVERS             | G06F 13/10                                  | (22) 23.08.2017                          |
| AND PRINTER PROFILES                      | G06F 13/40                                  | (54) DISPLAY METHOD AND DEVICE           |
| (73) Printerlogic, Inc.                   | G06F 3/038                                  | (73) Huawei Technologies Co., Ltd.       |
| (72) TAYLOR, Jarrett David                | (11) EP3564795                              | (72) LIU, Lin                            |
| WEDIG, Ryan George                        | (21) EP19181640.4                           | ZHU, Dengkui                             |
| ERCANBRACK, Corey Clint                   | (47) 07.07.2021                             | (51) G06F 3/147                          |
| ANDERSON, Devin Derrell                   | (22) 11.10.2017                             | (11) EP3455718                           |
| (31) 201662291475 P                       | (54) HUMAN INTERFACE DEVICE SWITCH          | (21) EP17727499.0                        |
| 201715423358                              | WITH SECURITY FUNCTION                      | (47) 07.07.2021                          |
| (32) 04.02.2016                           | (73) I/O INTERCONNECT, LTD.                 | (87) EP2017061535                        |
| 02.02.2017                                | (72) CHANG, Chih-Hsiung                     | 16.11.2017                               |
| (33) United States of America             | LIN, Kun-Yuan                               | (22) 12.05.2017                          |
| United States of America                  | (31) 201662406498 P                         | (54) SYSTEM FOR THE CREATION AND         |
| (51) G06F 3/12                            | 201662429167 P                              | DEPLOYMENT OF MULTIPLATFORM              |
| G06F 15/16                                | 201715726794                                | APPLICATIONS                             |
| (11) EP2976704                            | (32) 11.10.2016                             | (73) Mindus S.A.R.L                      |
| (21) EP13890020.4                         | 02.12.2016                                  | (72) MINDUS, Christopher                 |
| (47) 14.07.2021                           | 06.10.2017                                  | (31) 1654272                             |
| (87) US2013051855                         | (33) United States of America               | (32) 12.05.2016                          |
| 29.01.2015                                | United States of America                    | (33) France                              |
| (22) 24.07.2013                           | United States of America                    | (51) G06F 3/16                           |
| (54) MARKING AGENT CREDIT                 | (51) G06F 3/14                              | G10L 15/22                               |
| ADJUSTMENTS                               | G06F 15/16                                  | G10L 15/26                               |
| (73) Hewlett-Packard Development Company, | G06F 21/30                                  | G10L 15/32                               |
| L.P.                                      | G06F 9/44                                   | G06F 9/44                                |
| (72) BHASKARAN, Shinoj                    | G06F 9/451                                  | (11) EP3575957                           |
| TOMAR, Ruby                               | (11) EP2766820                              | (21) EP18778228.9                        |
| ARORA, Puneet Kumar                       | (21) EP12840609.7                           | (47) 07.07.2021                          |
| HAMMERSTAD, Diane R                       | (47) 07.07.2021                             | (87) CN2018080436                        |
| (51) G06F 3/14                            | (87) US2012060252                           | 04.10.2018                               |
| A63F 13/30                                | 18.04.2013                                  | (22) 26.03.2018                          |
| A63F 13/40                                | (22) 15.10.2012                             | (54) VOICE FUNCTION CONTROL METHOD       |
| (11) EP3005073                            | (54) SYSTEM AND METHOD FOR A                | AND APPARATUS                            |
| (21) EP14733017.9                         | DISTRIBUTED VIRTUAL DESKTOP                 | (73) Advanced New Technologies Co., Ltd. |
| (47) 07.07.2021                           | INFRASTRUCTURE                              | (72) PAN, Shen                           |
| (87) US2014039405                         | (73) Citrix Systems Inc.                    | (31) 201710210831                        |
| 11.12.2014                                | (72) GRAHAM, Simon                          | (32) 31.03.2017                          |
| (22) 23.05.2014                           | (31) 201161546701 P                         | (33) China                               |
| (54) METHOD AND APPARATUS FOR             | (32) 13.10.2011                             | (51) G06F 7/02                           |
| REDUCING HOPS ASSOCIATED WITH             | (33) United States of America               | G06K 9/00                                |
| A HEAD MOUNTED SYSTEM                     | (51) G06F 3/14                              | (11) EP2791781                           |
| (73) Sony Computer Entertainment America  | G06T 11/60                                  | (21) EP12816168.4                        |
| LLC                                       | G09G 5/36                                   | (47) 14.07.2021                          |
| (72) PERRY, David                         | H04M 1/725                                  | (87) US2012067999                        |
| (31) 201361832773 P                       | (11) EP3489906                              | 20.06.2013                               |
| 201314144185                              | (21) EP17843903.0                           | (22) 05.12.2012                          |
| (32) 07.06.2013                           | (47) 07.07.2021                             | (54) METHODS AND SYSTEMS FOR DATA        |
| 30.12.2013                                | (87) KR2017009089                           | ANALYSIS IN A STATE MACHINE              |
| (33) United States of America             | 01.03.2018                                  | (73) Micron Technology, Inc.             |
| United States of America                  | (22) 21.08.2017                             | (72) BROWN, David, R.                    |
| (51) G06F 3/14                            | (54) ELECTRONIC DEVICE, AND METHOD          | NOYES, Harold, B                         |
| G06F 3/0488                               | FOR CONTROLLING OPERATION OF                | (31) 201113327591                        |
| G06F 9/44                                 | ELECTRONIC DEVICE                           | (32) 15.12.2011                          |
| (11) EP3451147                            | (73) Samsung Electronics Co., Ltd.          | (33) United States of America            |
| (21) EP16900301.9                         | (72) KIM, Seungjin                          | (51) G06F 7/544                          |
| (47) 07.07.2021                           | LEE, Sungjun                                | G06N 3/04                                |
| (87) CN2016113196                         | LEE, Gwanghui                               | G06N 3/063                               |
| 02.11.2017                                | JUNG, Woojun                                | (11) EP3242253                           |
| (22) 29.12.2016                           | (31) 20160107236                            | (21) EP17169307.0                        |
| (54) METHOD, DEVICE AND SYSTEM            | (32) 23.08.2016                             | (47) 14.07.2021                          |
| FOR MANIPULATING MIRACAST                 | (33) Korea (Republic)                       | (22) 03.05.2017                          |
| PRESENTATION CONTENT                      | (51) G06F 3/14                              |                                          |



|                                                                                                               |                                                                              |                                                                                  |
|---------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| (54) HARDWARE IMPLEMENTATION OF A CONVOLUTIONAL NEURAL NETWORK                                                | THORNLEY, David Gregory                                                      | (21) EP15792326.9                                                                |
| (73) Imagination Technologies Limited                                                                         | (31) 201361894786 P                                                          | (47) 14.07.2021                                                                  |
| (72) GIBSON, Clifford                                                                                         | (32) 23.10.2013                                                              | (87) US2015030411                                                                |
| (72) IMBER, James                                                                                             | (33) United States of America                                                | 19.11.2015                                                                       |
| (31) 201607713                                                                                                | (51) G06F 8/65                                                               | (22) 12.05.2015                                                                  |
| (32) 03.05.2016                                                                                               | (11) EP3087480                                                               | (54) METHOD AND APPARATUS FOR PROVIDING HARDWARE SUPPORT FOR SELF-MODIFYING CODE |
| (33) United Kingdom                                                                                           | (21) EP14873633.3                                                            | (73) INTEL Corporation                                                           |
| (51) G06F 8/34                                                                                                | (47) 14.07.2021                                                              | (72) ABDALLAH, Mohammad                                                          |
| G06F 8/38                                                                                                     | (87) US2014070962                                                            | AVUDAIYAPPAN, Karthikeyan                                                        |
| (11) EP3329366                                                                                                | 02.07.2015                                                                   | (31) 201461991951 P                                                              |
| (21) EP16831965.5                                                                                             | (22) 17.12.2014                                                              | (32) 12.05.2014                                                                  |
| (47) 07.07.2021                                                                                               | (54) PROVIDING A SOFTWARE UPDATE TO COMPUTING DEVICES ON THE SAME NETWORK    | (33) United States of America                                                    |
| (87) AU2016050676                                                                                             | (73) Google LLC                                                              | (51) G06F 9/44                                                                   |
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| (22) 28.07.2016                                                                                               | STEWART, Paul                                                                | (21) EP14728015.0                                                                |
| (54) SYSTEMS AND METHODS FOR EXECUTABLE CONTENT AND EXECUTABLE CONTENT FLOW CREATION                          | (31) 201314139758                                                            | (47) 07.07.2021                                                                  |
| (73) WiseTech Global Limited                                                                                  | (32) 23.12.2013                                                              | (87) US2014035098                                                                |
| (72) WHITE, Richard                                                                                           | (33) United States of America                                                | 30.10.2014                                                                       |
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| SVERDLOV, Mikhail                                                                                             | (11) EP3299953                                                               | (54) CONTROLLING TASKS PERFORMED BY A COMPUTING SYSTEM                           |
| (31) 2015903059                                                                                               | (21) EP17001420.3                                                            | (73) AB Initio Technology LLC                                                    |
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| (32) 31.07.2015                                                                                               | (54) SYSTEM AND METHOD FOR PROVIDING AUTOMATIC FIRMWARE UPDATE MANAGEMENT    | (32) 23.04.2013                                                                  |
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| Australia                                                                                                     | (31) 201662377703 P                                                          | (21) EP16170923.3                                                                |
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| (51) G06F 8/41                                                                                                | (33) United States of America                                                | (22) 23.05.2016                                                                  |
| (11) EP2950211                                                                                                | (51) G06F 9/30                                                               | (54) METHOD AND DEVICE FOR DRAWING GUI                                           |
| (21) EP14742879.1                                                                                             | G06F 9/38                                                                    | (73) Xiaomi Inc.                                                                 |
| (47) 07.07.2021                                                                                               | (11) EP3525088                                                               | (72) DONG, Junjie                                                                |
| (87) JP2014050517                                                                                             | (21) EP19151260.7                                                            | (31) 201510770907                                                                |
| 31.07.2014                                                                                                    | (47) 14.07.2021                                                              | (32) 12.11.2015                                                                  |
| (22) 15.01.2014                                                                                               | (22) 10.01.2019                                                              | (33) China                                                                       |
| (54) PARALLELISM EXTRACTION METHOD AND METHOD FOR MAKING PROGRAM                                              | (54) MEMORY WRITE LOG STORAGE PROCESSORS, METHODS, SYSTEMS, AND INSTRUCTIONS | (51) G06F 9/46                                                                   |
| (73) Waseda University                                                                                        | (73) Intel Corporation                                                       | G06F 9/30                                                                        |
| (72) KASAHARA, Hironori                                                                                       | (72) DOSHI, Kshitij                                                          | G06F 9/38                                                                        |
| KIMURA, Keiji                                                                                                 | DEMENTIEV, Roman                                                             | (11) EP2972845                                                                   |
| HAYASHI, Akihiro                                                                                              | SUKHOMLINOV, Vadim                                                           | (21) EP14769450.9                                                                |
| MIKAMI, Hiroki                                                                                                | (31) 201815891028                                                            | (47) 07.07.2021                                                                  |
| KANEHAGI, Yohei                                                                                               | (32) 07.02.2018                                                              | (87) US2014024775                                                                |
| UMEDA, Dan                                                                                                    | (33) United States of America                                                | 25.09.2014                                                                       |
| SAWADA, Mitsuo                                                                                                | (51) G06F 9/38                                                               | (22) 12.03.2014                                                                  |
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| (33) Japan                                                                                                    | (47) 14.07.2021                                                              | (72) ABDALLAH, Mohammad                                                          |
| (51) G06F 8/60                                                                                                | (87) US2016051527                                                            | (31) 201361800123 P                                                              |
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| (47) 07.07.2021                                                                                               | (73) Advanced Micro Devices, Inc.                                            | H04W 16/00                                                                       |
| (87) US2014062042                                                                                             | (72) HAVLIR, Steven R.                                                       | H04W 24/02                                                                       |
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| (22) 23.10.2014                                                                                               | (32) 30.08.2016                                                              | (11) EP3552419                                                                   |
| (54) METHODS AND SYSTEMS FOR AUTOMATIC CONFIGURATION OF ALGORITHMS IN A SYSTEM BASED ON SELF AWARE ALGORITHMS | (33) United States of America                                                | (21) EP16819577.4                                                                |
| (73) Citrix Systems, Inc.                                                                                     | (51) G06F 9/38                                                               | (47) 14.07.2021                                                                  |
| (72) LACHAMBRE, Sheldon Ferdinand                                                                             | G06F 9/455                                                                   | (87) EP2016082624                                                                |
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| (54) SYSTEM AND METHOD FOR PROGRAMMING AND/OR MANAGEMENT OF CORE NETWORK SLICES        | (22) 14.05.2015                                                                                | (47) 07.07.2021                                                                    |
| (73) Huawei Technologies Co., Ltd.                                                     | (54) CODE SERVICE FOR LANGUAGE-INDEPENDENT DISPATCH                                            | (87) CN2017073916                                                                  |
| (72) VAISHNAVI, Ishan                                                                  | (73) Microsoft Technology Licensing, LLC                                                       | 08.09.2017                                                                         |
| AN, Xueli                                                                              | (72) MAMERI, Federico A.                                                                       | (22) 17.02.2017                                                                    |
| PENG, Chenghui                                                                         | CHEN, Zhengguang                                                                               | (54) METHOD AND APPARATUS FOR CHECKING INTEGRITY OF DISTRIBUTED SERVICE PROCESSING |
| TRIVISONNO, Riccardo                                                                   | ZHU, Shaofeng                                                                                  | (73) Advanced New Technologies Co., Ltd.                                           |
| WU, Jianjun                                                                            | FANNING, Michael C.                                                                            | (72) DOU, Fangyu                                                                   |
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| (54) METHOD FOR COMPOSING AND EXECUTING A REAL-TIME TASK-SEQUENCING PLAN               | (47) 14.07.2021                                                                                | (11) EP2840508                                                                     |
| (73) Krono - Safe                                                                      | (22) 13.12.2017                                                                                | (21) EP13193571.0                                                                  |
| (72) DAVID, Vincent                                                                    | (54) ENABLING THIRD PARTIES TO ADD EFFECTS TO AN APPLICATION                                   | (47) 07.07.2021                                                                    |
| BARBOT, Adrien                                                                         | (73) Facebook, Inc.                                                                            | (22) 19.11.2013                                                                    |
| (31) 1362893                                                                           | (72) SMET, Stef Marc                                                                           | (54) Apparatus and method for extended cache correction                            |
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| (33) France                                                                            | ARCURI, Michael Philip                                                                         | (72) Henry, G. Glenn                                                               |
| (51) G06F 9/50                                                                         | WILLIAMS, Joshua Ryan                                                                          | Jain, Dinesh K.                                                                    |
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| (22) 31.08.2017                                                                        | 17.04.2017                                                                                     | (11) EP3614268                                                                     |
| (54) SEARCH RESOURCE RECOMMENDATION METHOD AND RELATED PRODUCT                         | (33) United States of America                                                                  | (21) EP18189988.1                                                                  |
| (73) SHENZHEN HEYTAP TECHNOLOGY CORP., LTD.                                            | World Intellectual Property Office (WIPO)                                                      | (47) 07.07.2021                                                                    |
| (72) LUO, Yue                                                                          | (51) G06F 11/00                                                                                | (22) 21.08.2018                                                                    |
| (51) G06F 9/50                                                                         | H04L 29/06                                                                                     | (54) METHOD AND DEVICE FOR PROCESSING OF DATA USING CODED OPERATIONS               |
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| (54) SYSTEM, APPARATUS AND METHOD FOR STATEFUL APPLICATION OF CONTROL DATA IN A DEVICE | (72) PEGNA, David Lopes                                                                        | 21.03.2013                                                                         |
| (73) Intel Corporation                                                                 | MHATRE, Himanshu                                                                               | (22) 10.10.2011                                                                    |
| (72) HELDT-SHELLER, Nathan                                                             | BRDICZKA, Oliver                                                                               | (54) NONVOLATILE MEDIA DIRTY REGION TRACKING                                       |
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| (32) 09.06.2015                                                                        | (51) G06F 11/07                                                                                | MOSS, Darren                                                                       |
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|                                                                                        | (51) G06F 11/07                                                                                | (73) Baidu Online Network Technology (Beijing) Co., Ltd.                           |
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| CONG, Xiaoliang                             | Groleat, Tristan                               | (72) DEMEILLIEZ, Bruno                   |
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| (73) Advanced New Technologies Co., Ltd.    | (33) United States of America                  | (73) Microsoft Technology Licensing, LLC |
| (72) SUN, Yuanbo                            | (51) G06F 11/30                                | (72) STALL, Jonathon Michael             |
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| H04W 12/06                                  | SYSTEM AND METHOD                              | (87) US2017068612                        |
| (11) EP3607715                              | (73) British Telecommunications public limited | 12.07.2018                               |
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| DETECTION USING DIRECT                      | H04L 29/06                                     | (32) 06.01.2017                          |
| SIGNALING BETWEEN NFs                       | G06F 21/50                                     | (33) United States of America            |
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| (72) XU, Wenliang                           | G06N 99/00                                     | H04N 1/32                                |
| YANG, Yong                                  | (11) EP3143546                                 | H04N 1/44                                |
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| (47) 07.07.2021                             | IDLE PROCESSES                                 | (54) ELECTRONIC DEVICE, DATA SHARING     |
| (87) CN2017092868                           | (73) NEC Corporation                           | SYSTEM, AND DATA SHARING                 |
| 22.03.2018                                  | (72) QIAN, Zhiyun                              | METHOD                                   |
| (22) 13.07.2017                             | WANG, Jun                                      | (73) Kyocera Document Solutions Inc.     |
| (54) DATA MIGRATION METHOD AND              | LI, Zhichun                                    | (72) KAMINOGO, Akira                     |
| RELEVANT DEVICE                             | WU, Zhenyu                                     | (31) 2014173549                          |
| (73) GUANGDONG OPPO MOBILE                  | RHEE, Junghwan                                 | (32) 28.08.2014                          |
| TELECOMMUNICATIONS CORP., LTD.              | NING, Xia                                      | (33) Japan                               |
| (72) HONG, Yingyu                           | JIANG, Guofei                                  | (51) G06F 12/02                          |
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| (11) EP3617887                              | United States of America                       | (73) Google LLC                          |
| (21) EP18315021.8                           | (51) G06F 11/34                                | (72) Monish, SHAH                        |
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| (54) METHOD AND SYSTEM FOR                  | (47) 07.07.2021                                | (33) United States of America            |
| PROVIDING SERVICE REDUNDANCY                | (22) 30.05.2019                                | (51) G06F 12/02                          |
| BETWEEN A MASTER SERVER AND A               | (54) DEVICE AND METHOD FOR                     | G11C 7/10                                |
| SLAVE SERVER                                | OPTIMISING THE USE OVER TIME OF                | G11C 8/14                                |
| (73) OVH                                    | THE RESOURCES OF A COMPUTER                    | G11C 11/16                               |
| (72) Chapel, Thibault                       | INFRASTRUCTURE                                 | G11C 11/22                               |
|                                             | (73) BULL SAS                                  |                                          |

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| (11) EP3416169                 | (47) 14.07.2021                           | METHODS                          |
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| (47) 07.07.2021                | 29.08.2013                                | (72) SHIN, Hyunsuk               |
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| (54) MEMORY CIRCUIT HAVING     | (54) METHOD AND APPARATUS FOR LOAD        | VUONG, Hung, Quoc                |
| CONCURRENT WRITES AND METHOD   | SWITCH CONTROLLER                         | GIL, Amit                        |
| THEREFOR                       | (73) Qualcomm Incorporated                | (31) 201414295653                |
| (73) NXP USA, Inc.             | (72) SHIEH, Crown Sen                     | (32) 04.06.2014                  |
| (72) PELLE, Perry              | HUSSAIN, Abid                             | (33) United States of America    |
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| (47) 07.07.2021                | (21) EP16203687.5                         | (72) LI, Ang                     |
| (87) US2015056656              | (47) 14.07.2021                           | TAN, Kuan Hua                    |
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| (54) SCALABLE SYNCHRONIZATION  | CONTROLLERS                               | (32) 12.12.2018                  |
| MECHANISM FOR DISTRIBUTED      | (73) CODESYS Holding GmbH                 | (33) United States of America    |
| MEMORY                         | (72) Pfob, Michael                        | (51) G06F 13/42                  |
| (73) Intel Corporation         | Werner, Bernhard                          | H04W 56/00                       |
| (72) COLE, Clement T.          | (51) G06F 12/1027                         | (11) EP3198461                   |
| DINAN, James                   | (11) EP3454219                            | (21) EP14786392.2                |
| JOST, Gabriele                 | (21) EP18183528.1                         | (47) 14.07.2021                  |
| SMITH, Stanley C.              | (47) 07.07.2021                           | (87) US2014057487                |
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| (31) 201414573133              | EFFICIENT UTILISATION OF AN               | (54) STACK TIMING ADJUSTMENT FOR |
| (32) 17.12.2014                | ADDRESS TRANSLATION CACHE                 | SERIAL COMMUNICATIONS            |
| (33) United States of America  | (73) ARM Limited                          | (73) Micro Motion, Inc.          |
| (51) G06F 12/06                | (72) SHAJI LAL, Rakesh                    | (72) HAYS, Paul J.               |
| G11C 5/02                      | DOOLEY, Miles Robert                      | EYRE, Chris E.                   |
| G11C 5/14                      | (31) 201715685186                         | (51) G06F 15/02                  |
| H01L 23/48                     | (32) 24.08.2017                           | H04W 4/50                        |
| H01L 23/528                    | (33) United States of America             | H04W 76/14                       |
| H01L 25/065                    | (51) G06F 13/362                          | H04M 1/72412                     |
| H01L 25/18                     | G06F 13/40                                | H04M 1/72451                     |
| G06F 12/08                     | G06F 30/3312                              | H04M 1/72463                     |
| G06F 1/32                      | (11) EP3244325                            | H04M 1/725                       |
| G06F 1/3234                    | (21) EP16168898.1                         | (11) EP3223501                   |
| G06F 1/3287                    | (47) 07.07.2021                           | (21) EP17156800.9                |
| (11) EP2691957                 | (22) 10.05.2016                           | (47) 07.07.2021                  |
| (21) EP12764958.0              | (54) METHOD FOR THE SYNCHRONIZED          | (22) 20.02.2017                  |
| (47) 07.07.2021                | OUTPUT AND/OR SYNCHRONIZED                | (54) SYSTEM AND METHOD FOR       |
| (87) US2012031705              | PROCESSING OF SIGNALS                     | CHECKING THE SETTING OF A        |
| 04.10.2012                     | (73) dSPACE digital signal processing and | FUNCTION RESTRICTION MODE IN     |
| (22) 30.03.2012                | control engineering GmbH                  | AN ELECTRONIC DEVICE             |
| (54) ENERGY EFFICIENT POWER    | (72) Kalte, Heiko                         | (73) Casio Computer Co., Ltd.    |
| DISTRIBUTION FOR 3D INTEGRATED | Lubeley, Dominik                          | (72) IWASAKI, Shoichi            |
| CIRCUIT STACK                  | (51) G06F 13/40                           | (31) 2016060116                  |
| (73) Intel Corporation         | G06F 13/42                                | (32) 24.03.2016                  |
| (72) SARASWAT, Ruchir          | G06K 13/067                               | (33) Japan                       |
| SCHAEFER, Andre                | G06K 19/077                               | (51) G06F 15/16                  |
| SUPRIYANTO, Supriyanto         | (11) EP3152669                            | H04L 12/18                       |
| (31) 201113077359              | (21) EP15745589.0                         | H04L 12/28                       |
| (32) 31.03.2011                | (47) 14.07.2021                           | H04L 12/46                       |
| (33) United States of America  | (87) US2015033649                         | H04L 29/06                       |
| (51) G06F 12/0811              | 10.12.2015                                | H04L 12/761                      |
| G06F 12/0815                   | (22) 02.06.2015                           | H04L 12/931                      |
| G06F 12/0831                   |                                           | (11) EP3404879                   |
| G06F 12/084                    |                                           | (21) EP18182901.1                |

|                                          |                                          |                                          |
|------------------------------------------|------------------------------------------|------------------------------------------|
| (47) 14.07.2021                          | (54) METHOD FOR EFFICIENT PRIMARY        | (72) ROTHSCILLER, Chad                   |
| (22) 24.03.2006                          | KEY BASED QUERIES USING ATOMIC           | BATTAGIN, Daniel                         |
| (54) METRO ETHERNET NETWORK WITH         | RDMA READS ON CACHE FRIENDLY             | BENEDICT, Christopher                    |
| VIRTUAL LOCAL AREA NETWORK               | IN-MEMORY HASH INDEX                     | MOREIRA-SILVEIRA, Rodrigo                |
| INFORMATION SPECIFYING                   | (73) Oracle International Corporation    | COHEN, Eric                              |
| A BROADCAST DOMAIN AND                   | (72) TEOTIA, Siddharth                   | GULWANI, Sumit                           |
| INCLUDING A SERVICE INSTANCE             | KUNCHITHAPADAM, Krishna                  | ROUHANA, Dany                            |
| IDENTIFIER                               | KAMP, Jesse                              | SINGH, Rishabh                           |
| (73) Cisco Technology, Inc.              | LAHIRI, Tirthankar                       | ZORN, Benjamin Goth                      |
| (72) SAJASSI, Ali                        | GLEESON, Michael J.                      | VENKATESAN, Ramarathnam                  |
| (31) 117016                              | LOAIZA, Juan R.                          | DANILOV, Dmitri O.                       |
| (32) 28.04.2005                          | SWART, Garret F.                         | (31) 201113014520                        |
| (33) United States of America            | MACNAUGHTON, Neil J.S.                   | (32) 26.01.2011                          |
| (51) G06F 15/78                          | SHERGILL, Kam                            | (33) United States of America            |
| (11) EP3314451                           | (31) 201715606322                        | (51) G06F 16/27                          |
| (21) EP16736936.2                        | (32) 26.05.2017                          | (11) EP3252624                           |
| (47) 14.07.2021                          | (33) United States of America            | (21) EP17173254.8                        |
| (87) US2016032504                        | (51) G06F 16/23                          | (47) 14.07.2021                          |
| 29.12.2016                               | G06F 16/2455                             | (22) 29.05.2017                          |
| (22) 13.05.2016                          | G06F 16/27                               | (54) METHOD AND APPARATUS FOR            |
| (54) COMPUTER ARCHITECTURE               | (11) EP3407527                           | REPLICATING DATA                         |
| USING RAPIDLY RECONFIGURABLE             | (21) EP17740969.5                        | (73) Machbase Inc.                       |
| CIRCUITS AND HIGH-BANDWIDTH              | (47) 07.07.2021                          | (72) Kim, Sung Jin                       |
| MEMORY INTERFACES                        | (87) CN2017070648                        | (31) 20160066375                         |
| (73) Advanced Micro Devices, Inc.        | 27.07.2017                               | (32) 30.05.2016                          |
| (72) ROBERTS, David A.                   | (22) 09.01.2017                          | (33) Korea (Republic)                    |
| (31) 201514751947                        | (54) METHOD, DEVICE, AND SYSTEM FOR      | (51) G06F 16/29                          |
| (32) 26.06.2015                          | DATA SYNCHRONIZATION                     | (11) EP3628085                           |
| (33) United States of America            | (73) Advanced New Technologies Co., Ltd. | (21) EP19755719.2                        |
| (51) G06F 15/80                          | (72) SHAO, Shuai                         | (47) 07.07.2021                          |
| G06F 12/0811                             | (31) 201610031809                        | (87) US2019043009                        |
| (11) EP3384400                           | (32) 18.01.2016                          | 30.01.2020                               |
| (21) EP16871210.7                        | (33) China                               | (22) 23.07.2019                          |
| (47) 14.07.2021                          | (51) G06F 16/242                         | (54) MAP UNCERTAINTY AND                 |
| (87) US2016053958                        | G06F 16/2455                             | OBSERVATION MODELING                     |
| 08.06.2017                               | G06F 16/25                               | (73) Google LLC                          |
| (22) 27.09.2016                          | (11) EP3579099                           | (72) BUKOWSKI, Richard William           |
| (54) INSTRUCTION AND LOGIC               | (21) EP19166628.8                        | (31) 201862702570 P                      |
| FOR PROGRAMMABLE FABRIC                  | (47) 14.07.2021                          | (32) 24.07.2018                          |
| HIERARCHY AND CACHE                      | (22) 15.04.2011                          | (33) United States of America            |
| (73) Intel Corporation                   | (54) METHODS AND SYSTEMS FOR             | (51) G06F 16/33                          |
| (72) LINSKY, Leo A.                      | PERFORMING CROSS STORE JOINS             | (11) EP3198481                           |
| (31) 201514953529                        | IN A MULTI-TENANT STORE                  | (21) EP15778512.2                        |
| (32) 30.11.2015                          | (73) Salesforce.com, Inc.                | (47) 07.07.2021                          |
| (33) United States of America            | (72) Eidson, Bill C.                     | (87) US2015052653                        |
| (51) G06F 16/00                          | Weissman, Craig                          | 31.03.2016                               |
| G06F 16/955                              | Oliver, Kevin                            | (22) 28.09.2015                          |
| (11) EP3605352                           | Taylor, James                            | (54) PRODUCTIVITY TOOLS FOR              |
| (21) EP18851906.0                        | Fell, Simon Z.                           | CONTENT AUTHORIZING                      |
| (47) 07.07.2021                          | Schneider, Donovan A.                    | (73) Microsoft Technology Licensing, LLC |
| (87) CN2018102445                        | (31) 97366810                            | (72) KOHLMEIER, Bernhard S.J.            |
| 07.03.2019                               | 32595110 P                               | CHILAKAMARRI, Pradeep                    |
| (22) 27.08.2018                          | 32570910 P                               | SUN, Sirui                               |
| (54) SHORT-LINK PARSING METHOD,          | (32) 20.12.2010                          | (31) 201414499195                        |
| APPARATUS AND DEVICE                     | 20.04.2010                               | 201562131142 P                           |
| (73) Advanced New Technologies Co., Ltd. | 19.04.2010                               | 201514738091                             |
| (72) ZHENG, Li                           | (33) United States of America            | (32) 28.09.2014                          |
| (31) 201710748157                        | United States of America                 | 10.03.2015                               |
| (32) 28.08.2017                          | United States of America                 | 12.06.2015                               |
| (33) China                               | (51) G06F 16/26                          | (33) United States of America            |
| (51) G06F 16/22                          | (11) EP2668594                           | United States of America                 |
| G06F 16/907                              | (21) EP12739249.6                        | United States of America                 |
| (11) EP3631651                           | (47) 07.07.2021                          | (51) G06F 16/34                          |
| (21) EP18709452.9                        | (87) US2012022454                        | G06F 16/957                              |
| (47) 14.07.2021                          | 02.08.2012                               | (11) EP2715569                           |
| (87) US2018018837                        | (22) 24.01.2012                          | (21) EP12725184.1                        |
| 29.11.2018                               | (54) FORMATTING DATA BY EXAMPLE          | (47) 14.07.2021                          |
| (22) 20.02.2018                          | (73) Microsoft Technology Licensing, LLC | (87) US2012037756                        |

|                                        |                                          |                                            |
|----------------------------------------|------------------------------------------|--------------------------------------------|
| 06.12.2012                             | HORNUNG, Zelidrag                        | ADAPTIVE CONTEXT-BASED                     |
| (22) 14.05.2012                        | SHAH, Avni                               | MATCHING                                   |
| (54) METHOD FOR PRESENTING             | ROSART, Daniel                           | (73) CyberArk Software Ltd.                |
| DOCUMENTS USING A READING LIST         | (51) G06F 16/957                         | (72) SIMCA, Dor                            |
| PANEL                                  | (11) EP3467680                           | KANDEL, Tal                                |
| (73) Apple Inc.                        | (21) EP17809631.9                        | GELMAN, Alex                               |
| (72) MELTON, Donald D.                 | (47) 07.07.2021                          | SCHWARTZER, Daniel                         |
| ADLER, Darin B.                        | (87) CN2017085654                        | (31) 201916281313                          |
| LIU, Alice                             | 14.12.2017                               | (32) 21.02.2019                            |
| DECKER, Kevin W.                       | (22) 24.05.2017                          | (33) United States of America              |
| EIDSON, Brady K.                       | (54) INFORMATION PROCESSING              | (51) G06F 21/55                            |
| BARRACLOUGH, Gavin                     | METHOD AND DEVICE, AND METHOD            | G06F 21/62                                 |
| FALKENBURG, Steven J.                  | AND DEVICE FOR DISPLAYING                | (11) EP3036676                             |
| (31) 201161493276 P                    | DYNAMIC INFORMATION                      | (21) EP14744794.0                          |
| 201113192218                           | (73) Advanced New Technologies Co., Ltd. | (47) 14.07.2021                            |
| (32) 03.06.2011                        | (72) LI, Qucheng                         | (87) EP2014065063                          |
| 27.07.2011                             | (31) 201610393580                        | 26.02.2015                                 |
| (33) United States of America          | (32) 06.06.2016                          | (22) 15.07.2014                            |
| United States of America               | (33) China                               | (54) METHOD FOR PROTECTING AN              |
| (51) G06F 16/35                        | (51) G06F 17/18                          | INTEGRATED CIRCUIT AGAINST                 |
| G06F 16/36                             | G06K 9/62                                | UNAUTHORIZED ACCESS                        |
| (11) EP2257896                         | H04L 9/06                                | (73) Siemens AG Österreich                 |
| (21) EP09706670.8                      | H04L 29/06                               | (72) EPPENSTEINER, Friedrich               |
| (47) 14.07.2021                        | G06N 20/00                               | GHAMESHLU, Majid                           |
| (87) US2009032695                      | (11) EP3627759                           | TAUCHER, Herbert                           |
| 06.08.2009                             | (21) EP18840540.1                        | (31) 102013216692                          |
| (22) 30.01.2009                        | (47) 14.07.2021                          | (32) 22.08.2013                            |
| (54) FINANCIAL EVENT AND               | (87) CN2018097339                        | (33) Germany                               |
| RELATIONSHIP EXTRACTION                | 07.02.2019                               | (51) G06F 21/57                            |
| (73) Thomson Reuters Enterprise Centre | (22) 27.07.2018                          | (11) EP3474179                             |
| GmbH                                   | (54) METHOD AND APPARATUS FOR            | (21) EP18197321.5                          |
| (72) SCHILDER, Frank                   | ENCRYPTING DATA, METHOD AND              | (47) 07.07.2021                            |
| DOZIER, Christopher                    | APPARATUS FOR TRAINING MACHINE           | (22) 27.09.2018                            |
| KONDADADI, Ravi Kumar                  | LEARNING MODEL, AND ELECTRONIC           | (54) INFORMATION PROCESSING                |
| (31) 63047                             | DEVICE                                   | APPARATUS, METHOD FOR                      |
| 341926                                 | (73) Advanced New Technologies Co., Ltd. | CONTROLLING SAME, AND                      |
| (32) 30.01.2008                        | (72) YANG, Xinxing                       | COMPUTER PROGRAM                           |
| 22.12.2008                             | CAO, Shaosheng                           | (73) CANON KABUSHIKI KAISHA                |
| (33) United States of America          | ZHOU, Jun                                | (72) SHIMIZU, Shota                        |
| United States of America               | LI, Xiaolong                             | (31) 2017201956                            |
| (51) G06F 16/50                        | (31) 201710647102                        | (32) 18.10.2017                            |
| (11) EP3161412                         | (32) 01.08.2017                          | (33) Japan                                 |
| (21) EP15789997.2                      | (33) China                               | (51) G06F 21/62                            |
| (47) 14.07.2021                        | (51) G06F 21/53                          | (11) EP3696707                             |
| (87) CA2015000309                      | G06F 21/55                               | (21) EP19157577.8                          |
| 12.11.2015                             | G06F 21/62                               | (47) 14.07.2021                            |
| (22) 06.05.2015                        | (11) EP3214565                           | (22) 15.02.2019                            |
| (54) INDEXING METHOD AND SYSTEM        | (21) EP17158540.9                        | (54) A COMPUTER-IMPLEMENTED                |
| (73) Whitecap Scientific Corporation   | (47) 07.07.2021                          | METHOD FOR REMOVING ACCESS                 |
| (72) BROMLEY, Samuel Patrick           | (22) 28.02.2017                          | TO DATA                                    |
| CHARRON, Richard Jacques               | (54) METHOD OF CONTROLLING ACCESS        | (73) MasterCard International Incorporated |
| (31) 201414271013                      | TO A RESOURCE, DEVICE AND                | (72) GROARKE, Peter                        |
| (32) 06.05.2014                        | CORRESPONDING PROGRAM                    | GRAJA, Hubert                              |
| (33) United States of America          | (73) INGENICO GROUP                      | (51) G06F 30/18                            |
| (51) G06F 16/84                        | (72) NACCACHE, David                     | G06F 30/34                                 |
| G06F 16/957                            | GERAUD, Rémi                             | G06F 30/392                                |
| (11) EP2409248                         | (31) 1651714                             | (11) EP3333735                             |
| (21) EP09841668.8                      | (32) 01.03.2016                          | (21) EP16203521.6                          |
| (47) 07.07.2021                        | (33) France                              | (47) 07.07.2021                            |
| (87) CN2009000291                      | (51) G06F 21/55                          | (22) 12.12.2016                            |
| 23.09.2010                             | G06F 21/57                               | (54) METHOD AND COMPUTER PROGRAM           |
| (22) 18.03.2009                        | (11) EP3660717                           | FOR DETERMINING A PLACEMENT                |
| (54) WEB TRANSLATION WITH DISPLAY      | (21) EP19165639.6                        | OF AT LEAST ONE CIRCUIT FOR A              |
| REPLACEMENT                            | (47) 07.07.2021                          | RECONFIGURABLE LOGIC DEVICE                |
| (73) Google LLC                        | (22) 27.03.2019                          | (73) Fraunhofer-Gesellschaft zur Förderung |
| (72) TANG, Jie                         | (54) DYNAMIC AUTHORIZATION OF            | der angewandten Forschung e.V.             |
| YAO, Baogang                           | REQUESTED ACTIONS USING                  | (72) Feld, Dustin                          |
| CHIN, Jeffrey                          |                                          |                                            |

|                                                                     |                                                                        |                                                                                         |
|---------------------------------------------------------------------|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Soddemann, Thomas                                                   | (54) CARD DETECTION FOR A NFC (NEAR FIELD COMMUNICATION) READER SYSTEM | Hampf, Marcel<br>Olsson, Fredrik                                                        |
| (51) G06F 30/331                                                    |                                                                        | (51) G06K 9/00                                                                          |
| G06F 30/333                                                         |                                                                        | (11) EP2638508                                                                          |
| G06F 30/34                                                          | (73) NXP B.V.                                                          | (21) EP11840428.4                                                                       |
| (11) EP3455751                                                      | (72) HUEBER, Gernot                                                    | (47) 07.07.2021                                                                         |
| (21) EP17719635.9                                                   | MACNAMARA, Ian Thomas                                                  | (87) US2011053438                                                                       |
| (47) 07.07.2021                                                     | (31) 201816177290                                                      | 18.05.2012                                                                              |
| (87) EP2017060346                                                   | (32) 31.10.2018                                                        | (22) 27.09.2011                                                                         |
| 16.11.2017                                                          | (33) United States of America                                          | (54) SYSTEM AND METHOD FOR IDENTIFYING COMPLEX TOKENS IN AN IMAGE                       |
| (22) 02.05.2017                                                     | (51) G06K 7/10                                                         | (73) Tandent Computer Vision, LLC                                                       |
| (54) METHOD FOR DETERMING SIGNAL VALUES FROM AN FPGA DURING RUNNING | G06K 7/12                                                              | (72) SMITH, Casey Arthur                                                                |
| (73) dSPACE digital signal processing and control engineering GmbH  | G06K 19/06                                                             | (31) 927244                                                                             |
| (72) KALTE, Heiko                                                   | G07G 1/00                                                              | (32) 10.11.2010                                                                         |
| LUBELEY, Dominik                                                    | G06Q 20/20                                                             | (33) United States of America                                                           |
| (31) 16168901                                                       | G06Q 20/40                                                             | (51) G06K 9/00                                                                          |
| (32) 10.05.2016                                                     | (11) EP3392796                                                         | (11) EP3483783                                                                          |
| (33) European Patent Office (EPO)                                   | (21) EP18177088.4                                                      | (21) EP18196461.0                                                                       |
| (51) G06F 30/331                                                    | (47) 07.07.2021                                                        | (47) 07.07.2021                                                                         |
| G06F 30/34                                                          | (22) 02.04.2015                                                        | (22) 25.09.2018                                                                         |
| (11) EP3244326                                                      | (54) MULTIFUNCTION POINT OF SALE SYSTEM                                | (54) DISPLAY DEVICE                                                                     |
| (21) EP16168899.9                                                   | (73) Hand Held Products, Inc.                                          | (73) LG Electronics Inc.                                                                |
| (47) 07.07.2021                                                     | (72) VAN HORN, Erik                                                    | (72) LEE, Dongeun                                                                       |
| (22) 10.05.2016                                                     | KEARNEY, Sean Philip                                                   | KIM, Jungwhan                                                                           |
| (54) METHOD FOR CREATING A FPGA NETLIST                             | GIORDANO, Patrick Anthony                                              | KOO, Jeongmo                                                                            |
| (73) dSPACE digital signal processing and control engineering GmbH  | GOOD, Timothy                                                          | (31) 201762584113 P                                                                     |
| (72) Kalte, Heiko                                                   | DICKINSON, Chandler                                                    | 20180028111                                                                             |
| Lubeley, Dominik                                                    | AU, Ka Man                                                             | (32) 10.11.2017                                                                         |
| (51) G06K 7/00                                                      | WILZ, Sr., David                                                       | 09.03.2018                                                                              |
| G07F 19/00                                                          | FURLONG, John A.                                                       | (33) United States of America                                                           |
| G06F 21/86                                                          | HEJL, Benjamin                                                         | Korea (Republic)                                                                        |
| (11) EP3252652                                                      | WALCZYK, Joseph A.                                                     | (51) G06K 9/00                                                                          |
| (21) EP17173587.1                                                   | COYLE, Larry                                                           | B42D 25/21                                                                              |
| (47) 14.07.2021                                                     | ROSETTI, James                                                         | B42D 25/378                                                                             |
| (22) 30.05.2017                                                     | HAGGERTY, Thomas                                                       | B42D 25/405                                                                             |
| (54) CARD READER BODY WITH SECURE MEMORY                            | (31) 201461975241 P                                                    | G07D 7/20                                                                               |
| (73) INGENICO GROUP                                                 | 201514662922                                                           | (11) EP3686027                                                                          |
| (72) PAVAGEAU, Stéphane                                             | (32) 04.04.2014                                                        | (21) EP19153855.2                                                                       |
| JADEAU, Johann                                                      | 19.03.2015                                                             | (47) 14.07.2021                                                                         |
| (31) 1654938                                                        | (33) United States of America                                          | (22) 27.01.2019                                                                         |
| (32) 31.05.2016                                                     | United States of America                                               | (54) METHOD OF PRINTING AUTHENTICATION INDICATORS WITH AN AMPLITUDE-MODULATED HALF TONE |
| (33) France                                                         | (51) G06K 7/10                                                         | (73) U-NICA Systems AG                                                                  |
| (51) G06K 7/10                                                      | G06K 7/14                                                              | (72) Franken, Klaus                                                                     |
| (11) EP2989588                                                      | (11) EP3273383                                                         | (51) G06K 9/00                                                                          |
| (21) EP14727304.9                                                   | (21) EP17186742.7                                                      | G01N 23/046                                                                             |
| (47) 07.07.2021                                                     | (47) 07.07.2021                                                        | (11) EP3084405                                                                          |
| (87) US2014035259                                                   | (22) 15.12.2015                                                        | (21) EP14827807.0                                                                       |
| 30.10.2014                                                          | (54) ACCELERATION-BASED MOTION TOLERANCE AND PREDICTIVE CODING         | (47) 07.07.2021                                                                         |
| (22) 24.04.2014                                                     | (73) Hand Held Products, Inc.                                          | (87) FR2014053229                                                                       |
| (54) SCANNING SYSTEM                                                | (72) TODESCHINI, Erik                                                  | 25.06.2015                                                                              |
| (73) Datalogic USA, Inc.                                            | LEDWITH, James                                                         | (22) 09.12.2014                                                                         |
| (72) LIU, Xinping                                                   | (31) 201462097056 P                                                    | (54) METHOD FOR CHARACTERISING A PART                                                   |
| CHALEFF, Edward I.                                                  | 201514944320                                                           | (73) Safran Aircraft Engines                                                            |
| (31) 201313872045                                                   | (32) 27.12.2014                                                        | Centre National de la Recherche Scientifique                                            |
| (32) 26.04.2013                                                     | 18.11.2015                                                             | Ecole Normale Supérieure de Cachan                                                      |
| (33) United States of America                                       | (33) United States of America                                          | (72) SCHNEIDER, Julien                                                                  |
| (51) G06K 7/10                                                      | (51) G06K 7/14                                                         | HILD, François                                                                          |
| (11) EP3647988                                                      | (11) EP3789906                                                         | LECLERC, Hugo                                                                           |
| (21) EP19173933.3                                                   | (21) EP19195509.5                                                      | ROUX, Stéphane                                                                          |
| (47) 07.07.2021                                                     | (47) 07.07.2021                                                        | (31) 1363095                                                                            |
| (22) 10.05.2019                                                     | (22) 05.09.2019                                                        | (32) 19.12.2013                                                                         |
|                                                                     | (54) DETERMINE THE MODULE SIZE OF AN OPTICAL CODE                      |                                                                                         |
|                                                                     | (73) SICK AG                                                           |                                                                                         |
|                                                                     | (72) Schüler, Pascal                                                   |                                                                                         |

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|----------------------------------------|-----------------------------------------------|---------------------------------|
| (33) France                            | BRUNA, Mr. Arcangelo Ranieri                  | Münzer, Bernd                   |
| (51) G06K 9/00                         | SPAMPINATO, Mr. Giuseppe                      | (31) 102016121668               |
| G06F 9/44                              | (31) 201600094414                             | (32) 11.11.2016                 |
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| (21) EP14898089.9                      | (33) Italy                                    | (51) G06K 9/34                  |
| (47) 07.07.2021                        | (51) G06K 9/00                                | G06K 9/62                       |
| (87) CN2014082657                      | G06T 7/73                                     | G06T 7/00                       |
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| (22) 21.07.2014                        | (21) EP18774153.3                             | G06T 7/12                       |
| (54) IMAGE CLASSIFICATION METHOD       | (47) 07.07.2021                               | G06T 7/143                      |
| AND IMAGE CLASSIFICATION               | (87) JP2018031662                             | G06T 7/174                      |
| APPARATUS                              | 14.03.2019                                    | (11) EP2962281                  |
| (73) Yulong Computer Telecommunication | (22) 28.08.2018                               | (21) EP14708993.2               |
| Scientific (Shenzhen) Co. Ltd.         | (54) SIGNAL PROCESSING APPARATUS,             | (47) 14.07.2021                 |
| (72) LI, Changning                     | SIGNAL PROCESSING METHOD,                     | (87) US2014015952               |
| ZHANG, Yanyan                          | PROGRAM, AND MOVING BODY                      | 04.09.2014                      |
| MU, Yuezhong                           | (73) Sony Corporation                         | (22) 12.02.2014                 |
| (51) G06K 9/00                         | (72) YAMAMOTO Keitaro                         | (54) METHOD AND APPARATUS FOR   |
| G06K 9/46                              | ABE Shinichiro                                | LEARNING-ENHANCED ATLAS-BASED   |
| (11) EP3292510                         | TOYOSHI Masahiko                              | AUTO-SEGMENTATION               |
| (21) EP16726768.1                      | LEE Shun                                      | (73) Elekta, Inc.               |
| (47) 07.07.2021                        | (31) 2017173963                               | (72) HAN, Xiao                  |
| (87) DE2016200207                      | (32) 11.09.2017                               | (31) 201313782154               |
| 10.11.2016                             | (33) Japan                                    | (32) 01.03.2013                 |
| (22) 04.05.2016                        | (51) G06K 9/00                                | (33) United States of America   |
| (54) METHOD AND APPARATUS FOR          | H01L 21/56                                    | (51) G06K 9/38                  |
| DETECTING AND ASSESSING ROAD           | H01L 23/00                                    | G06K 9/46                       |
| REFLECTIONS                            | H01L 23/31                                    | G06T 11/00                      |
| (73) Continental Teves AG & Co. OHG    | (11) EP3435410                                | G06T 7/10                       |
| (72) FRITZ, Stefan                     | (21) EP17894547.3                             | (11) EP3400576                  |
| HARTMANN, Bernd                        | (47) 07.07.2021                               | (21) EP16836082.4               |
| AMTHOR, Manuel                         | (87) CN2017072710                             | (47) 07.07.2021                 |
| DENZLER, Joachim                       | 02.08.2018                                    | (87) FR2016000217               |
| (31) 102015208429                      | (22) 25.01.2017                               | 13.07.2017                      |
| (32) 06.05.2015                        | (54) CHIP ENCAPSULATION STRUCTURE             | (22) 30.12.2016                 |
| (33) Germany                           | AND ENCAPSULATION METHOD                      | (54) METHOD FOR THE GRAPHICS    |
| (51) G06K 9/00                         | (73) Shenzhen Goodix Technology Co., Ltd.     | PROCESSING OF IMAGES            |
| G06T 5/00                              | (72) LUO, Junping                             | (73) LAOVILAND EXPERIENCE       |
| H04N 5/232                             | (51) G06K 9/00                                | (72) TCHOUMOU, Jean-Thierry     |
| (11) EP3477939                         | H01L 27/32                                    | TCHOUMOU, Pascal                |
| (21) EP18202029.7                      | (11) EP3410491                                | RODRIGUEZ-TORRECILLAS, Matthias |
| (47) 07.07.2021                        | (21) EP18175211.4                             | JAULMES, Boris                  |
| (22) 23.10.2018                        | (47) 14.07.2021                               | (31) 1650004                    |
| (54) IMAGE PROCESSING METHOD AND       | (22) 30.05.2018                               | (32) 04.01.2016                 |
| DEVICE AND COMPUTER-READABLE           | (54) OLED PANEL, OLED MODULE,                 | (33) France                     |
| STORAGE MEDIUM STORING A               | FINGERPRINT IDENTIFICATION                    | (51) G06K 9/46                  |
| PROGRAM FOR PERFORMING                 | METHOD AND DEVICE THEREOF                     | G06K 9/62                       |
| BEAUTY PROCESSING ON FACE              | (73) Beijing Xiaomi Mobile Software Co., Ltd. | (11) EP3129915                  |
| PORTRAIT IMAGES                        | (72) HE, Quan Hua                             | (21) EP14889031.2               |
| (73) GUANGDONG OPPO MOBILE             | (31) 201710405861                             | (47) 07.07.2021                 |
| TELECOMMUNICATIONS CORP., LTD.         | (32) 31.05.2017                               | (87) CN2014075165               |
| (72) ZENG, Yuanqing                    | (33) China                                    | 15.10.2015                      |
| (31) 201711045673                      | (51) G06K 9/32                                | (22) 11.04.2014                 |
| (32) 31.10.2017                        | G06K 9/50                                     | (54) OBJECT DETECTION USING     |
| (33) China                             | (11) EP3321858                                | DIRECTIONAL FILTERING           |
| (51) G06K 9/00                         | (21) EP17201019.1                             | (73) Intel Corporation          |
| G06T 7/215                             | (47) 14.07.2021                               | (72) LI, Jianguo                |
| (11) EP3296923                         | (22) 10.11.2017                               | CHEN, Ke                        |
| (21) EP17162968.6                      | (54) AUTOMATIC IDENTIFICATION OF              | CHIU, Yi-Jen                    |
| (47) 07.07.2021                        | MEDICALLY RELEVANT VIDEO                      | WANG, Chen                      |
| (22) 27.03.2017                        | ELEMENTS                                      | PENG, Ya-Ti                     |
| (54) A METHOD OF DETECTING AN          | (73) Karl Storz SE & Co. KG                   | WANG, Bin Robin                 |
| OVERTAKING VEHICLE, RELATED            | (72) Hiltl, Christoph                         | (51) G06K 9/62                  |
| PROCESSING SYSTEM, OVERTAKING          | Stiller, Heinz-Werner                         | G06F 9/451                      |
| VEHICLE DETECTION SYSTEM AND           | Nader, Hassanzadeh                            | G06F 16/174                     |
| VEHICLE                                | Muth, Méliissa                                | G06F 16/30                      |
| (73) STMicroelectronics S.r.l.         | Stock, Frank                                  | G06F 16/583                     |
| (72) GUARNERI, Ms. Nunziata Ivana      | Mündermann, Lars                              | (11) EP3276487                  |



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| (47) 14.07.2021                                                                         | (33) China                                  | 10.11.2016                                                                                  |
| (22) 20.07.2017                                                                         | China                                       | (22) 04.05.2016                                                                             |
| (54) METHOD OF DETECTING SIMILAR APPLICATIONS AND ELECTRONIC DEVICE ADAPTED TO THE SAME | China                                       | (54) IDENTITY MANAGEMENT SERVICE USING A BLOCK CHAIN                                        |
| (73) Samsung Electronics Co., Ltd.                                                      | (51) G06K 19/04                             | (73) Ping Identity Corporation                                                              |
| (72) Seo, Youngjoon                                                                     | (11) EP3140784                              | (72) EBRAHIMI, Armin                                                                        |
| Yu, Seungmin                                                                            | (21) EP15718633.9                           | (31) 201562157256 P                                                                         |
| Jung, Minwoo                                                                            | (47) 07.07.2021                             | 201662304934 P                                                                              |
| (31) 20160096413                                                                        | (87) IL2015050285                           | (32) 05.05.2015                                                                             |
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| (33) Korea (Republic)                                                                   | (22) 18.03.2015                             | (33) United States of America                                                               |
| (51) G06K 13/08                                                                         | (54) IDENTIFICATION TAG AND ATTACHMENT      | United States of America                                                                    |
| (11) EP2414993                                                                          | (73) Haldor Advanced Technologies Ltd       | (51) G06K 19/07                                                                             |
| (21) EP10726612.4                                                                       | (72) DOR, Guy                               | G06K 19/073                                                                                 |
| (47) 14.07.2021                                                                         | AVISSARA, Morr                              | G06K 19/077                                                                                 |
| (87) NL2010050147                                                                       | (31) 201414269155                           | G06Q 10/08                                                                                  |
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| (54) CARD FEED UNIT, READ OUT UNIT, ATM AND METHOD                                      | (51) G06K 19/06                             | (47) 07.07.2021                                                                             |
| (73) Card Swipe Protection Technology B.V.                                              | G06K 19/07                                  | (87) US2018046450                                                                           |
| (72) VAN DEN BOGART, Leonardus, Antonius, Maria                                         | G06K 19/073                                 | 21.03.2019                                                                                  |
| GOEDEE, Cornelis, Johannes                                                              | H04L 29/06                                  | (22) 13.08.2018                                                                             |
| JONGH, DE, Marina, Helena                                                               | G06F 21/34                                  | (54) PACKAGE TRACKING LABEL                                                                 |
| (31) 2002677                                                                            | H04W 12/06                                  | (73) Qualcomm Incorporated                                                                  |
| 2003394                                                                                 | (11) EP3196793                              | (72) BALLAM, Robert Scott                                                                   |
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| (51) G06K 15/02                                                                         | (22) 12.08.2015                             | 12.12.2017                                                                                  |
| (11) EP3451234                                                                          | (54) IC CARD, IC MODULE, AND IC CARD SYSTEM | (33) United States of America                                                               |
| (21) EP18000651.2                                                                       | (73) Kabushiki Kaisha Toshiba               | United States of America                                                                    |
| (47) 14.07.2021                                                                         | (72) TANIGUCHI, Keita                       | (51) G06K 19/077                                                                            |
| (22) 03.08.2018                                                                         | (31) 2014169419                             | H01G 4/008                                                                                  |
| (54) SYSTEM AND METHOD FOR GENERATING IMAGES FOR INSPECTION                             | (32) 22.08.2014                             | H01G 4/18                                                                                   |
| (73) Advanced Vision Technology (AVT) Ltd.                                              | (33) Japan                                  | H01G 4/20                                                                                   |
| (72) Dekel-Klein, Maya                                                                  | (51) G06K 19/06                             | H01G 4/33                                                                                   |
| Gazala, Chanan                                                                          | H04L 9/00                                   | H01G 4/40                                                                                   |
| (31) 25407817                                                                           | H04L 9/32                                   | H01L 21/02                                                                                  |
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| (33) Israel                                                                             | (11) EP3329635                              | H01L 49/02                                                                                  |
| (51) G06K 17/00                                                                         | (21) EP16833664.2                           | (11) EP3367402                                                                              |
| H04L 29/06                                                                              | (47) 07.07.2021                             | (21) EP16857374.9                                                                           |
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| H04W 12/12                                                                              | (22) 01.08.2016                             | 27.04.2017                                                                                  |
| H04W 12/122                                                                             | (54) COUNTERFEIT PREVENTION                 | (22) 14.10.2016                                                                             |
| (11) EP3576003                                                                          | (73) Micali, Silvio                         | (54) CAPACITOR, METHOD FOR MANUFACTURING SAME, AND WIRELESS COMMUNICATION DEVICE USING SAME |
| (21) EP18745463.2                                                                       | (72) Micali, Silvio                         | (73) Toray Industries, Inc.                                                                 |
| (47) 07.07.2021                                                                         | (31) 201562199650 P                         | (72) SHIMIZU, Hiroji                                                                        |
| (87) CN2018071336                                                                       | (32) 31.07.2015                             | WAKITA, Junji                                                                               |
| 02.08.2018                                                                              | (33) United States of America               | MURASE, Seiichiro                                                                           |
| (22) 04.01.2018                                                                         | (51) G06K 19/06                             | (31) 2015206916                                                                             |
| (54) LEGAL CHIP IDENTIFICATION METHOD AND SYSTEM                                        | H04L 9/32                                   | (32) 21.10.2015                                                                             |
| (73) Tendyron Corporation                                                               | G06Q 20/02                                  | (33) Japan                                                                                  |
| (72) LI, Dongsheng                                                                      | G06Q 20/32                                  | (51) G06K 19/14                                                                             |
| (31) 201710060677                                                                       | G06Q 20/38                                  | G06Q 30/00                                                                                  |
| 201710060676                                                                            | G06Q 20/40                                  | (11) EP3192014                                                                              |
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|                                                                                         | H04W 12/04                                  | 17.03.2016                                                                                  |
|                                                                                         | H04W 12/06                                  | (22) 09.09.2015                                                                             |
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| (54) IDENTIFICATION SYSTEM, METHOD AND USER MEDIUM                                                               | Postech Academy-Industry- Foundation               | G06F 16/33                                                                            |
| (73) Kaba AG                                                                                                     | (72) Km, Jun Seok                                  | (11) EP3362950                                                                        |
| (72) KUSTER, Christian                                                                                           | Sim, Jae Yoon                                      | (21) EP16801673.1                                                                     |
| SCHACHER, Edgar                                                                                                  | Ryu, Hyun Surk                                     | (47) 14.07.2021                                                                       |
| (31) 13622014                                                                                                    | (31) 20130050544                                   | (87) US2016061657                                                                     |
| (32) 09.09.2014                                                                                                  | (32) 06.05.2013                                    | 18.05.2017                                                                            |
| (33) Switzerland                                                                                                 | (33) Korea (Republic)                              | (22) 11.11.2016                                                                       |
| (51) G06N 3/00                                                                                                   | (51) G06N 3/04                                     | (54) NEURAL NETWORK FOR QUERYING A DATABASE                                           |
| G06F 9/44                                                                                                        | G06N 3/063                                         | (73) Google LLC                                                                       |
| (11) EP3376441                                                                                                   | G06N 3/08                                          | (72) LE, Quoc V.                                                                      |
| (21) EP17161102.3                                                                                                | H04L 12/54                                         | SUTSKEVER, Ilya                                                                       |
| (47) 14.07.2021                                                                                                  | G06F 9/30                                          | NEELAKANTAN, Arvind                                                                   |
| (22) 15.03.2017                                                                                                  | G06F 9/38                                          | (31) 201562254698 P                                                                   |
| (54) A METHOD FOR EXECUTION OF A MACHINE LEARNING MODEL ON MEMORY RESTRICTED INDUSTRIAL DEVICE                   | (11) EP3607506                                     | (32) 12.11.2015                                                                       |
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| (72) Soler Garrido, Josep Frank, Johannes                                                                        | (47) 14.07.2021                                    | (51) G06N 3/04                                                                        |
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| G06N 3/063                                                                                                       | (22) 17.04.2018                                    | H04R 3/02                                                                             |
| G06N 3/08                                                                                                        | (54) FABRIC VECTORS FOR DEEP LEARNING ACCELERATION | G10L 21/02                                                                            |
| (11) EP3444757                                                                                                   | (73) Cerebras Systems Inc.                         | G10L 21/0208                                                                          |
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| (47) 07.07.2021                                                                                                  | MORRISON, Michael                                  | G10L 25/30                                                                            |
| (87) CN2016079431                                                                                                | JAMES, Michael Edwin                               | (11) EP3474280                                                                        |
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| (22) 15.04.2016                                                                                                  | LAUTERBACH, Gary R.                                | (47) 07.07.2021                                                                       |
| (54) DISCRETE DATA REPRESENTATION SUPPORTED DEVICE AND METHOD FOR FORWARD OPERATION OF ARTIFICIAL NEURAL NETWORK | (31) 201762486372 P                                | (22) 19.10.2017                                                                       |
| (73) Cambricon Technologies Corporation Limited                                                                  | 201762517949 P                                     | (54) SIGNAL PROCESSOR FOR SPEECH SIGNAL ENHANCEMENT                                   |
| (72) LIU, Shaoli                                                                                                 | 201762520433 P                                     | (73) Goodix Technology (HK) Company Limited                                           |
| YU, Yong                                                                                                         | 201762522065 P                                     | (72) DEFRAENE, Bruno Gabriel Paul G.                                                  |
| CHEN, Yunji                                                                                                      | 201762522081 P                                     | MADHU, Nilesh                                                                         |
| CHEN, Tianshi                                                                                                    | 201762542645 P                                     | TIRRY, Wouter Joos                                                                    |
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| (54) QUANTUM-ASSISTED TRAINING OF NEURAL NETWORKS                                                                | 19.06.2017                                         | (54) FAST INDEXING WITH GRAPHS AND COMPACT REGRESSION CODES ON ONLINE SOCIAL NETWORKS |
| (73) Lockheed Martin Corporation                                                                                 | 08.08.2017                                         | (73) Facebook, Inc.                                                                   |
| (72) ADACHI, Steven H.                                                                                           | 08.08.2017                                         | (72) DOUZE, Matthys                                                                   |
| DAVENPORT, Daniel M.                                                                                             | 01.11.2017                                         | SABLAYROLLES, Alexandre                                                               |
| HENDERSON, Maxwell P.                                                                                            | 09.02.2018                                         | JEGOU, Hervé                                                                          |
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| (51) G06N 3/04                                                                                                   | (33) United States of America                      | 10.12.2018                                                                            |
| G06N 3/063                                                                                                       | United States of America                           | (33) United States of America                                                         |
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| (21) EP14162787.7                                                                                                | United States of America                           | (51) G06N 3/12                                                                        |
| (47) 14.07.2021                                                                                                  | United States of America                           | (11) EP2507751                                                                        |
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| (54) Neuromorphic chip, method and apparatus for detecting spike event                                           | United States of America                           | (47) 14.07.2021                                                                       |
| (73) Samsung Electronics Co., Ltd.                                                                               | United States of America                           | (87) US2010058759                                                                     |
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|                                                                                                                  | G06N 3/08                                          | (54) RESTORATION SWITCHING ANALYSIS WITH MODIFIED GENETIC ALGORITHM                   |
|                                                                                                                  |                                                    | (73) ABB Power Grids Switzerland AG                                                   |

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| (51) G06Q 10/00<br>G06Q 10/08<br>G06Q 30/06<br>(11) EP3304443<br>(21) EP16729137.6<br>(47) 07.07.2021<br>(87) US2016034676<br>08.12.2016<br>(22) 27.05.2016<br>(54) METHODS OF ORDERING PRODUCTS<br>(73) Endries International Inc.<br>(72) ENDRIES, Steven<br>FISCHER, Edward<br>WEYENBERG, Patrick<br>(31) 201562168386 P<br>201514934656<br>(32) 29.05.2015<br>06.11.2015<br>(33) United States of America<br>United States of America     | (51) G06Q 10/10<br>G06F 9/451<br>(11) EP2741207<br>(21) EP13195999.1<br>(47) 14.07.2021<br>(22) 06.12.2013<br>(54) Method and system for providing<br>information based on context, and<br>computer-readable recording medium<br>thereof<br>(73) Samsung Electronics Co., Ltd<br>(72) Jeon, Hee-chul<br>Kim, Jung-ho<br>Park, Yong-gook<br>Choi, Seung-eok<br>(31) 20120142238<br>(32) 07.12.2012<br>(33) Korea (Republic) | (51) G06Q 40/04<br>G06F 21/60<br>G06F 21/64<br>G06F 16/25<br>(11) EP3531316<br>(21) EP18805645.1<br>(47) 07.07.2021<br>(87) CN2018087766<br>29.11.2018<br>(22) 22.05.2018<br>(54) BLOCK CHAIN-BASED DATA<br>PROCESSING METHOD AND DEVICE<br>(73) Advanced New Technologies Co., Ltd.<br>(72) WU, Hao<br>(31) 201710366698<br>(32) 23.05.2017<br>(33) China                                                                                                                                                                                                |
| (51) G06Q 10/00<br>G06Q 10/08<br>G06Q 30/06<br>(11) EP3304444<br>(21) EP16730935.0<br>(47) 07.07.2021<br>(87) US2016034253<br>08.12.2016<br>(22) 26.05.2016<br>(54) SYSTEMS FOR ORDERING<br>PRODUCTS<br>(73) Endries International Inc.<br>(72) ENDRIES, Steven<br>FISCHER, Edward<br>WEYENBERG, Patrick<br>(31) 201562168386 P<br>201514934614<br>(32) 29.05.2015<br>06.11.2015<br>(33) United States of America<br>United States of America | (51) G06Q 30/02<br>(11) EP2257925<br>(21) EP09711215.5<br>(47) 07.07.2021<br>(87) FR2009050223<br>20.08.2009<br>(22) 12.02.2009<br>(54) METHOD FOR DETERMINING A<br>LOCAL RATE OF TRANSFORMATION<br>OF AN OBJECT OF INTEREST<br>(73) Cliris<br>Zeller, Alexandre<br>(72) ZELLER, Alexandre<br>REVUE, Alexandre<br>(31) 0850872<br>(32) 12.02.2008<br>(33) France                                                           | (51) G06Q 50/30<br>G16H 50/30<br>(11) EP3631747<br>(21) EP18734946.9<br>(47) 07.07.2021<br>(87) IB2018053882<br>06.12.2018<br>(22) 31.05.2018<br>(54) METHOD AND SYSTEM FOR THE<br>EVALUATION OF THE RISK OF AORTIC<br>RUPTURE OR DISSECTION IN AN<br>INDIVIDUAL WITH AN ASCENDING<br>THORACIC AORTIC ANEURYSM<br>(73) Fondazione Ri.MED<br>Istituto Mediterraneo Per I Trapianti E<br>Terapie Ad Alta Specializzazione S.r.l -<br>I.S.M.E.T.T. S.r.l<br>(72) PASTA, Salvatore<br>SCARDULLA, Cesare<br>(31) 201700059572<br>(32) 31.05.2017<br>(33) Italy |
| (51) G06Q 10/06<br>G06Q 30/00<br>G06F 21/44<br>(11) EP2973165<br>(21) EP14714818.3<br>(47) 07.07.2021<br>(87) US2014018968<br>25.09.2014<br>(22) 27.02.2014<br>(54) SECURE END-TO-END PERMITTING<br>SYSTEM FOR DEVICE OPERATIONS<br>(73) Itron Networked Solutions, Inc.<br>(72) DUBEY, Aditi<br>DAMM, Benjamin N.<br>STJOHNS, Michael<br>VASWANI, Raj<br>(31) 201313843156<br>(32) 15.03.2013<br>(33) United States of America               | (51) G06Q 30/02<br>(11) EP2257924<br>(21) EP09709769.5<br>(47) 14.07.2021<br>(87) FR2009050225<br>20.08.2009<br>(22) 12.02.2009<br>(54) METHOD FOR GENERATING<br>A DENSITY IMAGE OF AN<br>OBSERVATION ZONE<br>(73) Cliris<br>Zeller, Alexandre<br>(72) ZELLER, Alexandre<br>REVUE, Alexandre<br>(31) 0850874                                                                                                               | (51) G06Q 90/00<br>H04L 9/32<br>G06Q 10/00<br>G06Q 10/06<br>G06Q 10/08<br>G06Q 50/00<br>G06Q 50/28<br>G06F 21/60<br>G06F 21/62<br>G06F 21/64<br>(11) EP3712798<br>(21) EP20161799.0<br>(47) 07.07.2021<br>(22) 09.03.2020<br>(54) DISTRIBUTED REGISTERS FOR<br>MANAGING THE LIFE CYCLE OF DATA<br>IN AERONAUTICS<br>(73) Thales<br>(72) COULMEAU, François<br>MARTINEZ, Dorian<br>PABIA, Guillaume<br>(31) 1902921<br>(32) 21.03.2019<br>(33) France                                                                                                      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                               | (51) G06T 1/00<br>(11) EP3743881<br>(21) EP19710859.0                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

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| (47) 14.07.2021                          | PARK, Hyunchul                     | (21) EP17715589.2                             |
| (87) US2019019410                        | MARK, William R.                   | (47) 07.07.2021                               |
| 29.08.2019                               | FINCHELSTEIN, Daniel Frederic      | (87) US2017023543                             |
| (22) 25.02.2019                          | SHACHAM, Ofer                      | 28.09.2017                                    |
| (54) GENERATING AND READING OPTICAL      | (31) 201662300684 P                | (22) 22.03.2017                               |
| CODES WITH VARIABLE DENSITY TO           | 201615389113                       | (54) ENCODING AND DECODING                    |
| ADAPT FOR VISUAL QUALITY AND             | (32) 26.02.2016                    | REVERSIBLE PRODUCTION-QUALITY                 |
| RELIABILITY                              | 22.12.2016                         | SINGLE-LAYER VIDEO SIGNALS                    |
| (73) Digimarc Corporation                | (33) United States of America      | (73) Dolby Laboratories Licensing Corporation |
| (72) SHARMA, Ravi, K.                    | United States of America           | (72) SU, Guan-Ming                            |
| DENEMARK, Tomas                          | (51) G06T 3/00                     | MILLER, Jon Scott                             |
| BRADLEY, Brett, A.                       | H04N 5/225                         | HUSAK, Walter J.                              |
| RHOADS, Geoffrey, B.                     | H04N 5/265                         | LEE, Yee Jin                                  |
| SINCLAIR, Emma C.                        | G03B 15/00                         | KADU, Harshad                                 |
| HOLUB, Vojtech                           | G03B 35/00                         | (31) 201662312450 P                           |
| BRUNK, Hugh L., Brunk                    | G03B 37/00                         | 201662427532 P                                |
| STACH, John, F.                          | (11) EP2993884                     | (32) 23.03.2016                               |
| FILLER, Tomas                            | (21) EP14791479.0                  | 29.11.2016                                    |
| MEYER, Joel, R.                          | (47) 07.07.2021                    | (33) United States of America                 |
| (31) 201862634898 P                      | (87) JP2014056712                  | United States of America                      |
| 201862659641 P                           | 06.11.2014                         | (51) G06T 5/50                                |
| 201862670562 P                           | (22) 13.03.2014                    | H04N 5/225                                    |
| 201862673738 P                           | (54) IMAGE PROCESSING DEVICE,      | H04N 5/232                                    |
| 201816002989                             | IMAGE PROCESSING METHOD AND        | H04N 17/00                                    |
| 201862730958 P                           | PROGRAM                            | G03B 15/00                                    |
| 201862751084 P                           | (73) Sony Corporation              | (11) EP3490241                                |
| (32) 25.02.2018                          | (72) KIMURA, Atsushi               | (21) EP17830670.0                             |
| 18.04.2018                               | (31) 2013095431                    | (47) 07.07.2021                               |
| 11.05.2018                               | (32) 30.04.2013                    | (87) JP2017016734                             |
| 18.05.2018                               | (33) Japan                         | 25.01.2018                                    |
| 07.06.2018                               | (51) G06T 5/00                     | (22) 27.04.2017                               |
| 13.09.2018                               | G06T 5/50                          | (54) IMAGE PROCESSING DEVICE AND              |
| 26.10.2018                               | (11) EP3480783                     | IMAGE PROCESSING METHOD                       |
| (33) United States of America            | (21) EP18190354.3                  | (73) Sony Corporation                         |
| United States of America                 | (47) 07.07.2021                    | (72) UCHIDA, Masashi                          |
| United States of America                 | (22) 23.08.2018                    | YOKOKAWA, Masatoshi                           |
| United States of America                 | (54) IMAGE-PROCESSING METHOD,      | (31) 2016144171                               |
| United States of America                 | APPARATUS AND DEVICE               | (32) 22.07.2016                               |
| United States of America                 | (73) GUANGDONG OPPO MOBILE         | (33) Japan                                    |
| United States of America                 | TELECOMMUNICATIONS CORP., LTD.     | (51) G06T 7/00                                |
| (51) G06T 1/00                           | (72) OUYANG, Dan                   | (11) EP3566204                                |
| H04L 9/32                                | TAN, Guohui                        | (21) EP18700789.3                             |
| G06F 21/10                               | (31) 201711059105                  | (47) 07.07.2021                               |
| G06F 21/16                               | (32) 01.11.2017                    | (87) FR2018050020                             |
| (11) EP3673391                           | (33) China                         | 12.07.2018                                    |
| (21) EP19740866.9                        | (51) G06T 5/00                     | (22) 04.01.2018                               |
| (47) 07.07.2021                          | H04N 5/765                         | (54) METHOD FOR DETERMINING                   |
| (87) CN2019087646                        | (11) EP3487168                     | A HETEROGENEITY INDEX OF                      |
| 25.07.2019                               | (21) EP18206261.2                  | MYOCARDIAL PERFUSION FROM                     |
| (22) 20.05.2019                          | (47) 14.07.2021                    | MEDICAL IMAGES                                |
| (54) COPYRIGHT PROTECTION BASED ON       | (22) 14.11.2018                    | (73) Université Grenoble Alpes                |
| HIDDEN COPYRIGHT INFORMATION             | (54) CONTENT PROVIDING APPARATUS,  | Institut Polytechnique de Grenoble            |
| (73) Advanced New Technologies Co., Ltd. | METHOD OF CONTROLLING THE          | Institut National de la Santé et de la        |
| (72) LI, Zhiguo                          | SAME, AND RECORDING MEDIUM         | Recherche Médicale                            |
| (51) G06T 1/20                           | THEREOF                            | Centre Hospitalier Universitaire Grenoble     |
| (11) EP3420527                           | (73) Samsung Electronics Co., Ltd. | Alpes                                         |
| (21) EP16829467.6                        | (72) OH, Sung Bo                   | (72) DESVIGNES, Michel                        |
| (47) 14.07.2021                          | CHOI, Byoung Jin                   | POUJOL, Julie                                 |
| (87) US2016068932                        | (31) 20170152122                   | GHEZZI, Catherine                             |
| 31.08.2017                               | (32) 15.11.2017                    | FAGRET, Daniel                                |
| (22) 28.12.2016                          | (33) Korea (Republic)              | BARONE-ROCHETTE, Gilles                       |
| (54) COMPILER TECHNIQUES FOR             | (51) G06T 5/00                     | RIOU, Laurent                                 |
| MAPPING PROGRAM CODE TO A                | H04N 19/117                        | (31) 1750066                                  |
| HIGH PERFORMANCE, POWER                  | H04N 19/154                        | (32) 04.01.2017                               |
| EFFICIENT, PROGRAMMABLE IMAGE            | H04N 19/172                        | (33) France                                   |
| PROCESSING HARDWARE PLATFORM             | H04N 19/176                        | (51) G06T 7/00                                |
| (73) Google LLC                          | H04N 19/80                         | (11) EP2428934                                |
| (72) MEIXNER, Albert                     | (11) EP3433833                     | (21) EP11181029.7                             |

|                                                                                                                                            |                                           |                                          |
|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|------------------------------------------|
| (47) 14.07.2021                                                                                                                            | (33) India                                | (22) 30.08.2018                          |
| (22) 13.09.2011                                                                                                                            | (51) G06T 7/73                            | (54) SCATTER CORRECTION USING            |
| (54) Method for estimating the movement of<br>a carrier in relation to an environment<br>and calculation device for a navigation<br>system | (11) EP3226208                            | EMISSION IMAGE ESTIMATE                  |
| (73) Airbus Defence and Space SAS                                                                                                          | (21) EP17163433.0                         | RECONSTRUCTED FROM NARROW                |
| (72) Polle, Bernard                                                                                                                        | (47) 14.07.2021                           | ENERGY WINDOW COUNTS IN                  |
| (31) 1003651                                                                                                                               | (22) 28.03.2017                           | POSITRON EMISSION TOMOGRAPHY             |
| (32) 14.09.2010                                                                                                                            | (54) INFORMATION PROCESSING DEVICE        | (73) Koninklijke Philips N.V.            |
| (33) France                                                                                                                                | AND COMPUTER PROGRAM                      | (72) ANDREYEV, Andriy                    |
| (51) G06T 7/00                                                                                                                             | (73) Seiko Epson Corporation              | SONG, Xiyun                              |
| (11) EP3627443                                                                                                                             | (72) LEVINSHTEIN, Alex                    | YE, Jinghan                              |
| (21) EP18195731.7                                                                                                                          | FU, Guoyi                                 | BAI, Chuanyong                           |
| (47) 14.07.2021                                                                                                                            | (31) 2016065733                           | HU, Zhiqiang                             |
| (22) 20.09.2018                                                                                                                            | (32) 29.03.2016                           | MCKNIGHT, Douglas B.                     |
| (54) CLASSIFYING A LYMPH NODE                                                                                                              | (33) Japan                                | (31) 201762558389 P                      |
| POSITION IN RESPECT OF A TUMOR                                                                                                             | (51) G06T 7/73                            | (32) 14.09.2017                          |
| POSITION                                                                                                                                   | G06T 7/80                                 | (33) United States of America            |
| (73) Siemens Healthcare GmbH                                                                                                               | (11) EP3561772                            | (51) G06T 11/00                          |
| (72) Grimmer, Rainer                                                                                                                       | (21) EP18211356.3                         | (11) EP3542289                           |
| Tietjen, Christian                                                                                                                         | (47) 07.07.2021                           | (21) EP17871171.9                        |
| (51) G06T 7/00                                                                                                                             | (22) 10.12.2018                           | (47) 14.07.2021                          |
| (11) EP3624054                                                                                                                             | (54) METHOD FOR CALIBRATING AN            | (87) CA2017051373                        |
| (21) EP19196603.5                                                                                                                          | LINESCANNING IMAGE RECORDING              | 24.05.2018                               |
| (47) 14.07.2021                                                                                                                            | UNIT                                      | (22) 17.11.2017                          |
| (22) 11.09.2019                                                                                                                            | (73) AIT Austrian Institute of Technology | (54) SYSTEMS AND METHODS FOR REAL-       |
| (54) ANALYSIS OF SKELETAL TRAUMA                                                                                                           | GmbH                                      | TIME IMAGING                             |
| USING DEEP LEARNING                                                                                                                        | (72) BLASCHITZ, Bernhard                  | (73) Elekta Limited                      |
| (73) Siemens Healthcare GmbH                                                                                                               | STOLC, Svorad                             | (72) LACHAINE, Martin Emile              |
| (72) Xu, Zhoubing                                                                                                                          | (31) 500552018                            | (31) 201615357193                        |
| Grbic, Sasa                                                                                                                                | (32) 23.01.2018                           | (32) 21.11.2016                          |
| Chabin, Guillaume                                                                                                                          | (33) Austria                              | (33) United States of America            |
| Shah, Amitkumar Bhupendrakumar                                                                                                             | (51) G06T 9/00                            | (51) G06T 11/00                          |
| (31) 201816128815                                                                                                                          | H04N 19/42                                | G06T 11/60                               |
| (32) 12.09.2018                                                                                                                            | (11) EP3672246                            | (11) EP3091510                           |
| (33) United States of America                                                                                                              | (21) EP19217021.5                         | (21) EP15166587.4                        |
| (51) G06T 7/149                                                                                                                            | (47) 14.07.2021                           | (47) 07.07.2021                          |
| (11) EP3522112                                                                                                                             | (22) 17.12.2019                           | (22) 06.05.2015                          |
| (21) EP19154836.1                                                                                                                          | (54) ASTC INTERPOLATION                   | (54) METHOD AND SYSTEM FOR               |
| (47) 14.07.2021                                                                                                                            | (73) Imagination Technologies Limited     | PRODUCING OUTPUT IMAGES                  |
| (22) 31.01.2019                                                                                                                            | (72) Rovers, Kenneth                      | (73) Reactive Reality AG                 |
| (54) MAPPING DISEASE SPREAD                                                                                                                | (31) 201820837                            | (72) Hauswiesner, Stefan                 |
| (73) Covidien LP                                                                                                                           | (32) 20.12.2018                           | Grasmug, Philipp                         |
| (72) KRIMSKY, William, S.                                                                                                                  | (33) United Kingdom                       | (51) G06T 11/00                          |
| (31) 201862624905 P                                                                                                                        | (51) G06T 9/20                            | G06T 11/60                               |
| 201916259449                                                                                                                               | H04N 19/12                                | H04L 12/58                               |
| (32) 01.02.2018                                                                                                                            | H04N 19/14                                | (11) EP3279808                           |
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| (33) United States of America                                                                                                              | (11) EP3350992                            | (47) 07.07.2021                          |
| (51) G06T 7/254                                                                                                                            | (21) EP16779187.0                         | (87) CN2016076949                        |
| (11) EP3457357                                                                                                                             | (47) 14.07.2021                           | 06.10.2016                               |
| (21) EP18156219.0                                                                                                                          | (87) IB2016055526                         | (22) 22.03.2016                          |
| (47) 07.07.2021                                                                                                                            | 23.03.2017                                | (54) PICTURE SYNTHESIS METHOD AND        |
| (22) 12.02.2018                                                                                                                            | (22) 16.09.2016                           | APPARATUS                                |
| (54) METHODS AND SYSTEMS FOR                                                                                                               | (54) METHODS AND APPARATUSES FOR          | (73) Advanced New Technologies Co., Ltd. |
| SURFACE FITTING BASED CHANGE                                                                                                               | ENCODING AND DECODING DIGITAL             | (72) DU, Zhijun                          |
| DETECTION IN 3D POINT-CLOUD                                                                                                                | IMAGES OR VIDEO STREAMS                   | LI, Sanping                              |
| (73) Tata Consultancy Services Limited                                                                                                     | (73) Sisvel Technology S.r.l.             | WANG, Nan                                |
| (72) BHOWMICK, Brojeshwar                                                                                                                  | (72) FRACASTORO, Giulia                   | HE, Qiang                                |
| AGARWAL, Swapna                                                                                                                            | MAGLI, Enrico                             | ZHAO, Yanjun                             |
| SINHA, SANJANA                                                                                                                             | (31) UB20153724                           | LAO, Zhenqiang                           |
| PURUSHOTHAMAN, Balamuralidhar                                                                                                              | (32) 18.09.2015                           | SHI, Jie                                 |
| MALLIK, Apurbaa                                                                                                                            | (33) Italy                                | WANG, Weixing                            |
| (31) 201721032503                                                                                                                          | (51) G06T 11/00                           | (31) 201510145112                        |
| (32) 13.09.2017                                                                                                                            | (11) EP3682425                            | (32) 30.03.2015                          |
|                                                                                                                                            | (21) EP18762280.8                         | (33) China                               |
|                                                                                                                                            | (47) 14.07.2021                           | (51) G06T 13/40                          |
|                                                                                                                                            | (87) EP2018073293                         | G06F 3/01                                |
|                                                                                                                                            | 21.03.2019                                | G06F 3/03                                |
|                                                                                                                                            |                                           | G06K 9/00                                |

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| G06N 3/00                                                                                   | (31) 865179 P                                                                                                    | (51) G06T 15/50                                                                                                     |
| G06T 11/60                                                                                  | (32) 10.11.2006                                                                                                  | H04N 5/235                                                                                                          |
| G06F 3/0481                                                                                 | (33) United States of America                                                                                    | H04N 5/262                                                                                                          |
| G06F 3/0482                                                                                 | (51) G06T 15/00                                                                                                  | (11) EP2590398                                                                                                      |
| G06F 3/0488                                                                                 | G06T 15/50                                                                                                       | (21) EP12000280.3                                                                                                   |
| A63F 13/533                                                                                 | (11) EP3276577                                                                                                   | (47) 07.07.2021                                                                                                     |
| A63F 13/537                                                                                 | (21) EP16181073.4                                                                                                | (22) 18.01.2012                                                                                                     |
| A63F 13/63                                                                                  | (47) 07.07.2021                                                                                                  | (54) Displaying of images with lighting on the basis of captured auxiliary images                                   |
| G06T 7/246                                                                                  | (22) 25.07.2016                                                                                                  | (73) Sony Group Corporation                                                                                         |
| H04M 1/725                                                                                  | (54) HÖLDER ADAPTIVE IMAGE SYNTHESIS                                                                             | (72) Thörn, Ola                                                                                                     |
| (11) EP3567457                                                                              | (73) Technische Universität Berlin                                                                               | (31) 201161554630 P                                                                                                 |
| (21) EP19172407.9                                                                           | University of Toronto                                                                                            | (32) 02.11.2011                                                                                                     |
| (47) 14.07.2021                                                                             | (72) Lessig, Christian                                                                                           | (33) United States of America                                                                                       |
| (22) 02.05.2019                                                                             | Fiume, Eugene                                                                                                    | (51) G06T 17/20                                                                                                     |
| (54) AVATAR CREATION USER INTERFACE                                                         | (51) G06T 15/04                                                                                                  | (11) EP2750109                                                                                                      |
| (73) Apple Inc.                                                                             | G06T 15/10                                                                                                       | (21) EP12306697.9                                                                                                   |
| (72) SCAPEL, Nicolas                                                                        | B60R 1/00                                                                                                        | (47) 07.07.2021                                                                                                     |
| FORSSELL, Lisa                                                                              | G02B 27/01                                                                                                       | (22) 28.12.2012                                                                                                     |
| GARCIA III, Robert                                                                          | (11) EP3571091                                                                                                   | (54) Tessellation of a parameterized 3D modeled object                                                              |
| GUZMAN, Aurelio                                                                             | (21) EP17818496.6                                                                                                | (73) Dassault Systèmes                                                                                              |
| VAN OS, Marcel                                                                              | (47) 14.07.2021                                                                                                  | (72) Quilot, Laurent                                                                                                |
| (31) 201862668200 P                                                                         | (87) EP2017082255                                                                                                | Feki, Abdelmonem                                                                                                    |
| 201862679950 P                                                                              | 26.07.2018                                                                                                       | Phung, Tuan Anh                                                                                                     |
| PA201870377                                                                                 | (22) 11.12.2017                                                                                                  | Roudil, Daniel                                                                                                      |
| PA201870372                                                                                 | (54) METHOD AND DEVICE FOR                                                                                       | (51) G06T 19/00                                                                                                     |
| PA201870374                                                                                 | DISPLAYING THE SURROUNDINGS OF                                                                                   | B33Y 50/00                                                                                                          |
| PA201870375                                                                                 | A VEHICLE                                                                                                        | (11) EP3412459                                                                                                      |
| 201816116221                                                                                | (73) Robert Bosch GmbH                                                                                           | (21) EP18160373.9                                                                                                   |
| 201816142288                                                                                | (72) LIEPELT, David                                                                                              | (47) 07.07.2021                                                                                                     |
| 201816142305                                                                                | CANO, Raphael                                                                                                    | (22) 07.03.2018                                                                                                     |
| 201816142328                                                                                | ESPARZA GARCIA, Jose Domingo                                                                                     | (54) PATH DATA GENERATION DEVICE FOR THREE-DIMENSIONAL MODELING, PROGRAM FOR THREE-DIMENSIONAL MODELING, AND METHOD |
| (32) 07.05.2018                                                                             | (31) 102017201002                                                                                                | (73) FUJIFILM Business Innovation Corp.                                                                             |
| 03.06.2018                                                                                  | (32) 23.01.2017                                                                                                  | (72) TAKAHASHI, Tomonari                                                                                            |
| 12.06.2018                                                                                  | (33) Germany                                                                                                     | (31) 2017111861                                                                                                     |
| 12.06.2018                                                                                  | (51) G06T 15/20                                                                                                  | (32) 06.06.2017                                                                                                     |
| 12.06.2018                                                                                  | (11) EP2565848                                                                                                   | (33) Japan                                                                                                          |
| 29.08.2018                                                                                  | (21) EP12182004.7                                                                                                | (51) G06T 19/00                                                                                                     |
| 26.09.2018                                                                                  | (47) 07.07.2021                                                                                                  | G06F 3/01                                                                                                           |
| 26.09.2018                                                                                  | (22) 28.08.2012                                                                                                  | (11) EP3398036                                                                                                      |
| 26.09.2018                                                                                  | (54) Program, information processing apparatus, information processing system, and information processing method | (21) EP16829461.9                                                                                                   |
| (33) United States of America                                                               | (73) Nintendo Co., Ltd.                                                                                          | (47) 14.07.2021                                                                                                     |
| United States of America                                                                    | (72) Shimizu, Takao                                                                                              | (87) US2016068164                                                                                                   |
| Denmark                                                                                     | (31) 2011192982                                                                                                  | 06.07.2017                                                                                                          |
| Denmark                                                                                     | (32) 05.09.2011                                                                                                  | (22) 22.12.2016                                                                                                     |
| Denmark                                                                                     | (33) Japan                                                                                                       | (54) FEEDBACK FOR OBJECT POSE TRACKER                                                                               |
| United States of America                                                                    | (51) G06T 15/50                                                                                                  | (73) Microsoft Technology Licensing, LLC                                                                            |
| United States of America                                                                    | G06T 15/80                                                                                                       | (72) SHOTTON, Jamie, Daniel, Joseph                                                                                 |
| United States of America                                                                    | (11) EP2977960                                                                                                   | FITZGIBBON, Andrew, William                                                                                         |
| United States of America                                                                    | (21) EP15167852.1                                                                                                | TAYLOR, Jonathan, James                                                                                             |
| (51) G06T 15/00                                                                             | (47) 14.07.2021                                                                                                  | BANKS, Richard, Malcolm                                                                                             |
| G06F 9/32                                                                                   | (22) 15.05.2015                                                                                                  | SWEENEY, David                                                                                                      |
| (11) EP1921584                                                                              | (54) SHADING CG REPRESENTATIONS OF MATERIALS                                                                     | CORISH, Robert                                                                                                      |
| (21) EP07021497.8                                                                           | (73) Chaos Software Ltd.                                                                                         | SELLEN, Abigail, Jane                                                                                               |
| (47) 14.07.2021                                                                             | (72) Mitev, Peter Ognyanov                                                                                       | SOTO, Eduardo, Alberto                                                                                              |
| (22) 05.11.2007                                                                             | Iliev, Ivaylo Katev                                                                                              | (31) 201514985854                                                                                                   |
| (54) Graphics processing apparatus, graphics library module, and graphics processing method | Yordanov, Ivelin Yankov                                                                                          | (32) 31.12.2015                                                                                                     |
| (73) Sony Interactive Entertainment Inc.                                                    | (31) 201414278025                                                                                                | (33) United States of America                                                                                       |
| (72) Lengyel, Eric                                                                          | 201414448666                                                                                                     | (51) G06T 19/00                                                                                                     |
| Engstad, Pal-Kristian                                                                       | (32) 15.05.2014                                                                                                  | G06F 3/01                                                                                                           |
| Cerny, Mark Evan                                                                            | 31.07.2014                                                                                                       | G06K 9/00                                                                                                           |
| Hoffman, Nathaniel                                                                          | (33) United States of America                                                                                    | (11) EP3550527                                                                                                      |
| Olick, Jon                                                                                  | United States of America                                                                                         |                                                                                                                     |
| Kaneko, Motoi                                                                               |                                                                                                                  |                                                                                                                     |
| Washizu, Yoshinori                                                                          |                                                                                                                  |                                                                                                                     |

|                                                |                                    |                                               |
|------------------------------------------------|------------------------------------|-----------------------------------------------|
| (21) EP19174778.1                              | Conard, Walter S.                  | (54) PAPER SHEET PROCESSING SYSTEM            |
| (47) 07.07.2021                                | (31) 201562162393 P                | (73) Glory Ltd.                               |
| (22) 10.03.2014                                | (32) 15.05.2015                    | (72) MATSUMOTO, Yasuhiro                      |
| (54) INFORMATION PROCESSING                    | (33) United States of America      | (31) 2016031008                               |
| DEVICE, INFORMATION PROCESSING                 | (51) G07C 5/00                     | (32) 22.02.2016                               |
| METHOD AND PROGRAM                             | G07C 5/08                          | (33) Japan                                    |
| (73) Sony Corporation                          | H04L 29/06                         | (51) G07D 11/00                               |
| (72) KASAHARA, Shunichi                        | (11) EP3364626                     | (11) EP2876613                                |
| REKIMOTO, Junichi                              | (21) EP18157374.2                  | (21) EP14182916.8                             |
| (31) 2013078895                                | (47) 07.07.2021                    | (47) 07.07.2021                               |
| (32) 04.04.2013                                | (22) 11.08.2006                    | (22) 29.08.2014                               |
| (33) Japan                                     | (54) UNIVERSAL EVENT/DATA RECORDER | (54) Media depository                         |
| (51) G06T 19/20                                | SYSTEM                             | (73) NCR Corporation                          |
| A61C 13/00                                     | (73) WI-Tronix, LLC                | (72) Kallin, Frederik                         |
| A61C 5/40                                      | (72) JORDAN, Lawrence B.           | Bruce, Joshua                                 |
| G16H 50/50                                     | (31) 707448 P                      | Fernandez, Abhay                              |
| (11) EP3461456                                 | (32) 11.08.2005                    | Mezil, Ahmed                                  |
| (21) EP18196352.1                              | (33) United States of America      | Ross, Robert                                  |
| (47) 07.07.2021                                | (51) G07C 5/08                     | Joseph, Mathew                                |
| (22) 27.08.2012                                | G06F 9/445                         | (31) 201314090407                             |
| (54) A METHOD AND SYSTEM FOR 3D                | (11) EP3329470                     | (32) 26.11.2013                               |
| ROOT CANAL TREATMENT PLANNING                  | (21) EP16725854.0                  | (33) United States of America                 |
| (73) Dentsply Implants NV                      | (47) 07.07.2021                    | (51) G07F 9/00                                |
| Maillefer Instruments Holding S.À.R.L.         | (87) EP2016062159                  | G07F 9/02                                     |
| (72) VAN LIERDE, Carl                          | 02.02.2017                         | G07F 11/00                                    |
| PATTIJN, Veerle                                | (22) 30.05.2016                    | G07F 13/06                                    |
| VALLOTTON, Paul-Henri                          | (54) METHOD AND DEVICE FOR         | G06Q 30/06                                    |
| (31) 201115265                                 | EXCHANGING DATA USING THE          | (11) EP3044749                                |
| (32) 05.09.2011                                | CONTROL DEVICE OF A MOTOR          | (21) EP14781735.7                             |
| (33) United Kingdom                            | VEHICLE                            | (47) 14.07.2021                               |
| (51) G06T 19/20                                | (73) Robert Bosch GmbH             | (87) US2014055645                             |
| G06F 30/00                                     | (72) RITTER, Claus                 | 19.03.2015                                    |
| (11) EP3567500                                 | GEBAUER, Carsten                   | (22) 15.09.2014                               |
| (21) EP18171518.6                              | DOEHREN, Stefan                    | (54) PRODUCT CATEGORIZATION USER              |
| (47) 14.07.2021                                | HEYL, Andreas                      | INTERFACE FOR A DISPENSING                    |
| (22) 09.05.2018                                | KRISO, Stefan                      | DEVICE                                        |
| (54) PREPARATION OF A THREE-                   | (31) 102015214518                  | (73) The Coca-Cola Company                    |
| DIMENSIONAL MODEL FOR DATA                     | (32) 30.07.2015                    | (72) TAYLOR, Sydney Abram                     |
| TRANSMISSION                                   | (33) Germany                       | JONES, Cynthia D.                             |
| (73) Siemens Aktiengesellschaft                | (51) G07C 9/00                     | CHA, Jae-ho                                   |
| (72) Krause, Stefan                            | (11) EP3622490                     | LIND, Samuel Thomas                           |
| Lipp, Christian                                | (21) EP18733156.6                  | SNOWDEN, Christopher Paul                     |
| Nowitschkow, Alexander                         | (47) 07.07.2021                    | CUPPARI, Scot                                 |
| Robl, Peter                                    | (87) AT2018060090                  | (31) 201361877549 P                           |
| (51) G07B 15/06                                | 15.11.2018                         | (32) 13.09.2013                               |
| (11) EP2690601                                 | (22) 09.05.2018                    | (33) United States of America                 |
| (21) EP13075047.4                              | (54) METHOD FOR OPERATING A        | (51) G08B 3/10                                |
| (47) 14.07.2021                                | DISPENSING MACHINE                 | G08B 5/36                                     |
| (22) 23.07.2013                                | (73) KEBAG AG                      | G08B 6/00                                     |
| (54) Toll control method, toll control devices | (72) KIRCHTAG, Harald              | G08B 7/06                                     |
| and toll system with such toll control         | SCHEBA, Franz                      | G08B 25/00                                    |
| devices                                        | (31) 102017110346                  | G08B 29/18                                    |
| (73) Toll Collect GmbH                         | (32) 12.05.2017                    | (11) EP3489919                                |
| (72) Lorenzen, Dirk                            | (33) Germany                       | (21) EP17203574.3                             |
| (31) 102012014870                              | (51) G07D 3/00                     | (47) 07.07.2021                               |
| (32) 23.07.2012                                | G07D 9/00                          | (22) 24.11.2017                               |
| (33) Germany                                   | G07D 7/00                          | (54) APPARATUS, METHOD AND                    |
| (51) G07B 17/00                                | G07D 11/00                         | COMPUTER PROGRAM FOR                          |
| (11) EP3093825                                 | G07D 11/28                         | INDICATING AN EMERGENCY                       |
| (21) EP15202933.6                              | G07D 11/32                         | SITUATION                                     |
| (47) 07.07.2021                                | G07D 11/50                         | (73) Vestel Elektronik Sanayi ve Ticaret A.S. |
| (22) 29.12.2015                                | G07D 11/60                         | (72) ÖZTEKİN, Güner                           |
| (54) SYSTEM AND METHOD FOR                     | (11) EP3422304                     | YILMAZ, Evren Gökhan                          |
| APPLYING POSTAGE INDICIA TO ONE                | (21) EP17756517.3                  | (51) G08B 13/08                               |
| OR MORE MAILPIECES ON A HIGH                   | (47) 07.07.2021                    | G09F 3/03                                     |
| SPEED MAIL SORTER                              | (87) JP2017006511                  | (11) EP3493170                                |
| (73) Fluence Automation LLC                    | 31.08.2017                         | (21) EP18204984.1                             |
| (72) Bowers, Brian                             | (22) 22.02.2017                    | (47) 07.07.2021                               |

|                                   |                                     |                                        |
|-----------------------------------|-------------------------------------|----------------------------------------|
| (22) 07.11.2018                   | (87) KR2016011810                   | 10.08.2017                             |
| (54) WIRELESS TAMPER DEVICE       | 01.06.2017                          | (22) 03.02.2017                        |
| (73) The Boeing Company           | (22) 20.10.2016                     | (54) LOW POWER, HIGH RESOLUTION        |
| (72) Price, Wade                  | (54) OSD INFORMATION GENERATION     | AUTOMATED METER READING,               |
| Olsen, Bruce                      | CAMERA, OSD INFORMATION             | CENTRALIZED DATA COLLECTION,           |
| Roeder, Raymond                   | SYNTHESIS TERMINAL (20), AND OSD    | AND ANALYTICS                          |
| (31) 201715289876                 | INFORMATION SHARING SYSTEM          | (73) Apana Inc.                        |
| (32) 02.12.2017                   | COMPRISING SAME                     | (72) ROSE, Matthew W.                  |
| (33) United States of America     | (73) Hanwha Techwin Co., Ltd.       | BURNS, Frank                           |
| (51) G08B 13/14                   | (72) SHIM, Jung Min                 | PETERSON, Matthew Maher                |
| H02H 5/10                         | CHO, Sung Bong                      | PECKHAM, Canyon Daniel                 |
| H02J 1/08                         | (31) 20150167143                    | SIDERSKIY, Valentin                    |
| (11) EP3370318                    | (32) 27.11.2015                     | HUMPHREY, David Royce                  |
| (21) EP18159250.2                 | (33) Korea (Republic)               | REMMERS, Thomas                        |
| (47) 07.07.2021                   | (51) G08B 21/24                     | (31) 201662292147 P                    |
| (22) 28.02.2018                   | G07C 9/00                           | 201662432431 P                         |
| (54) MERCHANDISE SECURITY SYSTEM  | (11) EP3503057                      | 201715423512                           |
| COMPRISING ELECTRIC POWER         | (21) EP18215411.2                   | 201715423500                           |
| SUPPLY                            | (47) 07.07.2021                     | (32) 05.02.2016                        |
| (73) Zelos Concept GmbH           | (22) 21.12.2018                     | 09.12.2016                             |
| (72) MERSCHMANN, Carsten          | (54) METHOD AND APPARATUS FOR       | 02.02.2017                             |
| (31) 102017104420                 | DETECTING WHEN A MOBILE DEVICE      | 02.02.2017                             |
| (32) 02.03.2017                   | IS LEFT IN A ROOM                   | (33) United States of America          |
| (33) Germany                      | (73) Carrier Corporation            | United States of America               |
| (51) G08B 13/196                  | (72) Mukundala, Sumanth Kumar       | United States of America               |
| H04L 9/06                         | Kuenzi, Adam                        | United States of America               |
| H04L 9/08                         | (31) 201711046507                   | (51) G08C 19/02                        |
| H04L 9/14                         | (32) 23.12.2017                     | H04N 5/232                             |
| H04L 9/30                         | (33) India                          | H04Q 9/00                              |
| (11) EP3378189                    | (51) G08B 25/01                     | (11) EP3579543                         |
| (21) EP16865359.0                 | (11) EP3378046                      | (21) EP18748837.4                      |
| (47) 07.07.2021                   | (21) EP16815937.4                   | (47) 07.07.2021                        |
| (87) CA2016051350                 | (47) 14.07.2021                     | (87) JP2018002836                      |
| 26.05.2017                        | (87) IB2016057008                   | 09.08.2018                             |
| (22) 18.11.2016                   | 26.05.2017                          | (22) 30.01.2018                        |
| (54) SECURE LAYERED ENCRYPTION OF | (22) 21.11.2016                     | (54) CAMERA MANIPULATION DEVICE        |
| DATA STREAMS                      | (54) SYSTEM FOR THE SIGNALING AND   | (73) Kowa Company, Ltd.                |
| (73) Genetec Inc.                 | MANAGEMENT OF EMERGENCY             | (72) AZEGAMI, Tomohisa                 |
| (72) RACZ, Pierre                 | CALLS FOR MOTORCYCLES               | (31) 2017015096                        |
| RIOUX, Frédéric                   | (73) Easyfly Sagl                   | (32) 31.01.2017                        |
| (31) 201562258022 P               | (72) GALLI, Massimo                 | (33) Japan                             |
| (32) 20.11.2015                   | (31) UB20155761                     | (51) G08C 23/04                        |
| (33) United States of America     | 201600077880                        | H04B 10/25                             |
| (51) G08B 13/196                  | (32) 20.11.2015                     | H04B 10/80                             |
| H04L 12/10                        | 25.07.2016                          | (11) EP3507921                         |
| H04L 12/40                        | (33) Italy                          | (21) EP17758894.4                      |
| H04N 7/18                         | Italy                               | (47) 14.07.2021                        |
| (11) EP3446437                    | (51) G08B 25/10                     | (87) EP2017072101                      |
| (21) EP17718080.9                 | H04K 3/00                           | 08.03.2018                             |
| (47) 07.07.2021                   | (11) EP3477611                      | (22) 04.09.2017                        |
| (87) EP2017059244                 | (21) EP18202689.8                   | (54) OPTICAL TRANSCEIVER, OPTICAL      |
| 26.10.2017                        | (47) 14.07.2021                     | SYSTEM, INTERVENTIONAL DEVICE          |
| (22) 19.04.2017                   | (22) 25.10.2018                     | AND METHOD FOR SUPPLYING               |
| (54) POWER MANAGEMENT MODULE AND  | (54) DETECTION AND ALERT DEVICE FOR | ENERGY AND RETURNING DATA              |
| METHOD FOR MANAGING POWER         | ALARM SYSTEM AND ALARM SYSTEM       | (73) Koninklijke Philips N.V.          |
| SUPPLY                            | COMPRISING SAME                     | (72) VAN DER MARK, Martinus, Bernardus |
| (73) Canon Kabushiki Kaisha       | (73) TELECOM DESIGN                 | WIJBRANS, Klaas, Cornelis, Jan         |
| (72) EL KOLLI, Yacine             | (72) FILHOL, Didier                 | LUCASSEN, Gerhardus, Wilhelmus         |
| LAGRANGE, Pascal                  | (31) 1760092                        | (31) 16186959                          |
| MERLET, Hervé                     | (32) 26.10.2017                     | (32) 02.09.2016                        |
| (31) 201607059                    | (33) France                         | (33) European Patent Office (EPO)      |
| (32) 22.04.2016                   | (51) G08C 15/00                     | (51) G08G 1/052                        |
| (33) United Kingdom               | H04B 1/04                           | (11) EP2483105                         |
| (51) G08B 13/196                  | H04Q 9/00                           | (21) EP10820981.8                      |
| H04N 7/18                         | (11) EP3411864                      | (47) 07.07.2021                        |
| (11) EP3383030                    | (21) EP17748231.2                   | (87) US2010045892                      |
| (21) EP16868791.1                 | (47) 07.07.2021                     | 07.04.2011                             |
| (47) 14.07.2021                   | (87) US2017016411                   | (22) 18.08.2010                        |



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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) SYSTEM AND METHOD FOR<br>INTEGRATING SMARTPHONE<br>TECHNOLOGY INTO SAFETY<br>MANAGEMENT PLATFORM TO<br>IMPROVE DRIVER SAFETY                                                                                                                                                                                                                                                                         | (72) Bryant, Jacklyn<br>(31) 201206121<br>(32) 05.04.2012<br>(33) United Kingdom                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | G06F 21/72<br>G06F 21/79<br>(11) EP3616360<br>(21) EP19732240.7<br>(47) 07.07.2021<br>(87) CN2019080372<br>27.06.2019<br>(22) 29.03.2019<br>(54) MANAGING CRYPTOGRAPHIC KEYS<br>BASED ON IDENTITY INFORMATION<br>(73) Advanced New Technologies Co., Ltd.<br>(72) FENG, Zhiyuan<br>LI, Yanpeng<br>CHENG, Long                                                                                                      |
| (73) Omnitrac, LLC<br>(72) WILKES, Samuel, M., III.<br>FERRARA, Michael, N., Jr.<br>MAHANY, Richard, J.<br>BEGLEY, Peter, J.                                                                                                                                                                                                                                                                              | (51) G09B 23/28<br>(11) EP3566223<br>(21) EP17816417.4<br>(47) 14.07.2021<br>(87) DK2017050417<br>12.07.2018<br>(22) 08.12.2017<br>(54) A TRAINING MANIKIN<br>(73) Ambu A/S<br>(72) ZHAO, Qiaofeng<br>(31) 201710011210<br>(32) 06.01.2017<br>(33) China                                                                                                                                                                                                                                                                                                                                                                                                                       | (51) G09C 1/00<br>H04L 9/32<br>G06Q 20/10<br>G06F 21/53<br>G06F 21/62<br>(11) EP3619665<br>(21) EP19732216.7<br>(47) 07.07.2021<br>(87) CN2019081182<br>27.06.2019<br>(22) 03.04.2019<br>(54) PROCESSING AND STORING<br>BLOCKCHAIN DATA UNDER<br>A TRUSTED EXECUTION<br>ENVIRONMENT<br>(73) Advanced New Technologies Co., Ltd.<br>(72) WEI, Changzheng<br>YAN, Ying<br>ZHAO, Boran<br>SONG, Xuyang<br>DU, Huabing |
| (31) 246767 P<br>704038<br>(32) 29.09.2009<br>11.02.2010<br>(33) United States of America<br>United States of America                                                                                                                                                                                                                                                                                     | (51) G09B 23/28<br>G16H 50/50<br>G16B 5/30<br>(11) EP2948885<br>(21) EP14743797.4<br>(47) 14.07.2021<br>(87) US2014012752<br>31.07.2014<br>(22) 23.01.2014<br>(54) METHODS, SYSTEMS, AND<br>COMPUTER READABLE MEDIA FOR<br>DATA ANALYSIS AND INFERENCE<br>OF PARTICLE DIFFUSION IN TARGET<br>MATERIALS AND TARGET MATERIAL<br>SIMULANTS<br>(73) The University of North Carolina At<br>Chapel Hill<br>(72) FOREST, Mark, Gregory<br>MELLNIK, John, William<br>VASQUEZ, Paula, Andrea<br>HILL, David, Brooks<br>MCKINLEY, Scott, Alister<br>(31) 201361755841 P<br>201361767220 P<br>(32) 23.01.2013<br>20.02.2013<br>(33) United States of America<br>United States of America | (51) G09F 3/00<br>G09F 3/03<br>G09F 13/20<br>(11) EP3496076<br>(21) EP18397530.9<br>(47) 07.07.2021<br>(22) 03.12.2018<br>(54) SEALING OF A PACKAGE<br>(73) UPM Raflatac Oy<br>(72) Herranen, Jari<br>Lehtonen, Pasi<br>Pietarinen, Markku<br>Hirvonen, Jari<br>(31) 20176098<br>(32) 08.12.2017<br>(33) Finland                                                                                                   |
| (51) G08G 1/16<br>B60N 2/90<br>B60W 50/16<br>(11) EP3378706<br>(21) EP16870373.4<br>(47) 07.07.2021<br>(87) JP2016082694<br>08.06.2017<br>(22) 02.11.2016<br>(54) VEHICULAR NOTIFICATION DEVICE<br>AND VEHICULAR NOTIFICATION<br>METHOD<br>(73) Clarion Co., Ltd.<br>(72) FUJITA, Yasuhiro<br>HASHIMOTO, Takeshi<br>KONO, Kenji<br>(31) 2015232633<br>(32) 30.11.2015<br>(33) Japan                       | (51) G09B 23/28<br>G16H 50/50<br>G16B 5/30<br>(11) EP2948885<br>(21) EP14743797.4<br>(47) 14.07.2021<br>(87) US2014012752<br>31.07.2014<br>(22) 23.01.2014<br>(54) METHODS, SYSTEMS, AND<br>COMPUTER READABLE MEDIA FOR<br>DATA ANALYSIS AND INFERENCE<br>OF PARTICLE DIFFUSION IN TARGET<br>MATERIALS AND TARGET MATERIAL<br>SIMULANTS<br>(73) The University of North Carolina At<br>Chapel Hill<br>(72) FOREST, Mark, Gregory<br>MELLNIK, John, William<br>VASQUEZ, Paula, Andrea<br>HILL, David, Brooks<br>MCKINLEY, Scott, Alister<br>(31) 201361755841 P<br>201361767220 P<br>(32) 23.01.2013<br>20.02.2013<br>(33) United States of America<br>United States of America | (51) G09F 3/00<br>G09F 3/03<br>G09F 13/20<br>(11) EP3496076<br>(21) EP18397530.9<br>(47) 07.07.2021<br>(22) 03.12.2018<br>(54) SEALING OF A PACKAGE<br>(73) UPM Raflatac Oy<br>(72) Herranen, Jari<br>Lehtonen, Pasi<br>Pietarinen, Markku<br>Hirvonen, Jari<br>(31) 20176098<br>(32) 08.12.2017<br>(33) Finland                                                                                                   |
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| G09G 5/14                           | (51) G10K 11/178                         | (73) YAMAHA CORPORATION            |
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| (72) OU, Li-Chen                    | (73) Harman International Industries,    | University Of Montreal             |
| LUO, Ming, Ronnier                  | Incorporated                             | (72) SONG, Inchul                  |
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| (72) CENGARLE, Giulio                                                                                 | (73) Dolby International AB                                                                        | (22) 17.12.2018                                                                                                                |
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| (11) EP3304383                               | (73) State Atomic Energy Corporation    | SURGE ARRESTER                  |
| (21) EP16800610.4                            | "Rosatom" on Behalf of The Russian      | (73) DEHN SE + Co KG            |
| (47) 07.07.2021                              | Federation                              | (72) ZÄUNER, Edmund             |
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| (54) DE NOVO DIPLOID GENOME                  | NIKEL, Kirill Albertovich               | (51) H01F 1/153                 |
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| (73) Fresenius Medical Care Deutschland      | PAYNE, Liam                             | (51) H01F 5/00                  |
| GmbH                                         | HUTSON, Chris                           | A61B 34/20                      |
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| (33) Germany                                 | (51) H01B 1/02                          | IMAGE-BASED NAVIGATION          |
| (51) G16H 50/20                              | H01B 1/22                               | (73) Medtronic Navigation, Inc. |
| G16B 40/30                                   | H05K 3/32                               | (72) HARTMANN, Steven L.        |
| (11) EP3274885                               | (11) EP3188314                          | BURG, Bruce M.                  |
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| (47) 07.07.2021                              | (47) 07.07.2021                         | JACOBSEN, Brad                  |
| (87) EP2016056670                            | (87) JP2015073092                       | KOENIG, Matthew W.              |
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| (22) 24.03.2016                              | (22) 18.08.2015                         | (32) 28.01.2011                 |
| (54) METHOD FOR DETERMINING                  | (54) CONDUCTOR CONNECTION               | (33) United States of America   |
| GASTROINTESTINAL TRACT                       | STRUCTURE, METHOD FOR                   | (51) H01F 5/02                  |
| DYSBIOSIS                                    | PRODUCING SAME, CONDUCTIVE              | H01F 6/04                       |
| (73) Genetic Analysis AS                     | COMPOSITION, AND ELECTRONIC             | H01F 6/06                       |
| (72) LINDAHL, Torbjørn                       | COMPONENT MODULE                        | (11) EP2801986                  |
| KARLSSON, Magdalena                          | (73) Mitsui Mining & Smelting Co., Ltd. | (21) EP13758274.8               |
| SEKELJA, Monika                              | (72) KAMIKORIYAMA, Yoichi               | (47) 07.07.2021                 |
| HEGGE, Finn                                  | YAMAUCHI, Shinichi                      | (87) JP2013056129               |
| (31) 201505364                               | YOSHIDA, Mami                           | 12.09.2013                      |
| (32) 27.03.2015                              | NAKAYAMA, Shigeki                       | (22) 06.03.2013                 |
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| (51) G21C 1/02                               | (32) 29.08.2014                         | SUPERCONDUCTING DEVICE          |
| G21C 15/00                                   | (33) Japan                              | (73) Fujikura Ltd.              |
| G21C 15/247                                  | (51) H01C 7/12                          | (72) DAIBO, Masanori            |
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| (47) 14.07.2021                                                                                                         | (33) Japan                                                                                                                        | (47) 07.07.2021                                                                         |
| (22) 14.08.2019                                                                                                         | (51) H01G 9/20                                                                                                                    | (22) 20.10.2014                                                                         |
| (54) A DUAL COIL SOLENOID VALVE FOR A FUEL GAS CONTROL VALVE AND THE CONTROL METHOD THEREOF                             | H01L 31/18                                                                                                                        | (54) Contact elements for medium to high voltage switches                               |
| (73) Ningbo Richen Electrical Appliance Co., Ltd.                                                                       | H01L 31/068                                                                                                                       | (73) ABB Power Grids Switzerland AG                                                     |
| (72) ZHOU, Yin                                                                                                          | H01L 31/042                                                                                                                       | (72) Skarby, Per                                                                        |
| WANG, Youbin                                                                                                            | H01L 31/0475                                                                                                                      | Steiger, Ueli                                                                           |
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| (51) H01F 27/28                                                                                                         | (22) 11.12.2017                                                                                                                   | H01H 71/04                                                                              |
| H01F 38/14                                                                                                              | (54) HIGH PERFORMANCE SOLAR CELLS, ARRAYS AND MANUFACTURING PROCESSES THEREFOR                                                    | H01R 9/24                                                                               |
| H02J 50/00                                                                                                              | (73) mPower Technology, Inc.                                                                                                      | H01R 9/26                                                                               |
| H02J 50/12                                                                                                              | (72) OKANDAN, Murat                                                                                                               | H01R 13/66                                                                              |
| (11) EP3607636                                                                                                          | CRUZ-CAMPA, Jose, Luis                                                                                                            | H01T 4/04                                                                               |
| (21) EP18712620.6                                                                                                       | (31) 201662432289 P                                                                                                               | H01T 4/06                                                                               |
| (47) 14.07.2021                                                                                                         | (32) 09.12.2016                                                                                                                   | (11) EP3192092                                                                          |
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| (54) A SYSTEM FOR WIRELESS POWER TRANSFER BETWEEN LOW AND HIGH ELECTRICAL POTENTIAL, AND A HIGH VOLTAGE CIRCUIT BREAKER | H01M 16/00                                                                                                                        | 17.03.2016                                                                              |
| (73) ABB Power Grids Switzerland AG                                                                                     | H02J 7/00                                                                                                                         | (22) 04.09.2015                                                                         |
| (72) SALINAS, Ener                                                                                                      | H02J 7/34                                                                                                                         | (54) OVERVOLTAGE PROTECTION IN MODULAR DESIGN                                           |
| BORMANN, Dierk                                                                                                          | H02P 1/18                                                                                                                         | (73) SALTEK s.r.o.                                                                      |
| (31) 17165430                                                                                                           | (11) EP2269262                                                                                                                    | (72) SUCHY, Jaromir                                                                     |
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| (47) 07.07.2021                                                                                                         | (73) Kinitolo Consulting Limited                                                                                                  | H01T 4/06                                                                               |
| (22) 31.10.2018                                                                                                         | (72) WENDEL, Soren                                                                                                                | H02B 1/052                                                                              |
| (54) TRANSFORMER AND METHOD OF MANUFACTURING A TRANSFORMER                                                              | BIZA, Vladimir                                                                                                                    | (11) EP3236548                                                                          |
| (73) ABB Power Grids Switzerland AG                                                                                     | (31) 20080169                                                                                                                     | (21) EP17158035.0                                                                       |
| (72) Grading, Thomas                                                                                                    | (32) 14.03.2008                                                                                                                   | (47) 07.07.2021                                                                         |
| Drofenik, Uwe                                                                                                           | (33) Czech Republic                                                                                                               | (22) 27.02.2017                                                                         |
| (51) H01G 9/00                                                                                                          | (51) H01H 1/16                                                                                                                    | (54) DIN RAIL DEVICE MOUNT ASSEMBLIES, SYSTEMS AND METHODS INCLUDING LOCKING MECHANISMS |
| H01G 9/04                                                                                                               | H01H 1/24                                                                                                                         | (73) Raycap, Surge Protective Devices, Ltd.                                             |
| H01G 9/048                                                                                                              | H01H 73/04                                                                                                                        | (72) KAMENSEK, Sebastjan                                                                |
| H01G 9/055                                                                                                              | (11) EP3232461                                                                                                                    | VUKOTIC, Milenko                                                                        |
| (11) EP3385968                                                                                                          | (21) EP15866460.7                                                                                                                 | JURICEV, Igor                                                                           |
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| (22) 31.03.2017                                                                                                         | (54) BREAKER AND CONTACT DEVICE HAVING ROTATABLE FIXED CONTACT THEREOF                                                            | (33) United States of America                                                           |
| (54) ELECTRODE FOIL, WINDING CAPACITOR, ELECTRODE FOIL MANUFACTURING METHOD, AND WINDING CAPACITOR MANUFACTURING METHOD | (73) Zhejiang Chint Electrics Co., Ltd.                                                                                           | (51) H01H 11/00                                                                         |
| (73) Nippon Chemi-Con Corporation                                                                                       | (72) JIANG, Huahua                                                                                                                | H01H 33/02                                                                              |
| (72) NARITA, Yoshiyuki                                                                                                  | ZHENG, Yingchuan                                                                                                                  | H01H 33/52                                                                              |
| NAGAHARA, Kazuhiro                                                                                                      | LIU, Wenjun                                                                                                                       | (11) EP3767657                                                                          |
| TANAKA, Atsushi                                                                                                         | (31) 201420779405 U                                                                                                               | (21) EP20179615.8                                                                       |
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|                                                                                                                         |                                                                                                                                   | (73) Schneider Electric Industries SAS                                                  |
|                                                                                                                         |                                                                                                                                   | (72) MILAN, Thierry                                                                     |
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| (51) H01H 19/02                                                      | (33) United States of America                                                                                       | (73) Nichia Corporation                                                                                                                                                   |
| H01H 19/08                                                           | United States of America                                                                                            | (72) NARITA, Junya                                                                                                                                                        |
| H01H 19/58                                                           | (51) H01J 37/32                                                                                                     | OKADA, Takuya                                                                                                                                                             |
| H01H 27/06                                                           | H01J 61/54                                                                                                          | WAKAI, Yohei                                                                                                                                                              |
| (11) EP3300094                                                       | H05H 1/46                                                                                                           | INOUE, Yoshiki                                                                                                                                                            |
| (21) EP16796601.9                                                    | (11) EP3254302                                                                                                      | SAKO, Naoya                                                                                                                                                               |
| (47) 07.07.2021                                                      | (21) EP16746990.7                                                                                                   | KADAN, Katsuyoshi                                                                                                                                                         |
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| (54) ROTARY SWITCH                                                   | (22) 27.01.2016                                                                                                     | (51) H01L 21/02                                                                                                                                                           |
| (73) Alpha Corporation                                               | (54) APPARATUS AND METHOD FOR PLASMA IGNITION WITH A SELF-RESONATING DEVICE                                         | H01L 31/18                                                                                                                                                                |
| (72) OKADA, Takahiro                                                 | (73) MKS Instruments, Inc.                                                                                          | (11) EP2871683                                                                                                                                                            |
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| (32) 21.05.2015                                                      | WALTHER, Steven, R.                                                                                                 | (47) 07.07.2021                                                                                                                                                           |
| (33) Japan                                                           | WU, Chen                                                                                                            | (22) 19.09.2014                                                                                                                                                           |
| (51) H01H 31/16                                                      | (31) 201514616089                                                                                                   | (54) Method for cleaning and passivating chalcogenide layers                                                                                                              |
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| (47) 14.07.2021                                                      | (51) H01J 49/00                                                                                                     | Universiteit Hasselt                                                                                                                                                      |
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| (54) CENTER TURN AND TWIST MECHANISM OF A SWITCHGEAR                 | (87) IB2012001054                                                                                                   | (31) 13191997                                                                                                                                                             |
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| (72) KADAM, Ajit                                                     | (22) 30.05.2012                                                                                                     | (33) European Patent Office (EPO)                                                                                                                                         |
| CHAUHAN, Shashwat                                                    | (54) REMOVAL OF IONS FROM SURVEY SCANS USING VARIABLE WINDOW BAND-PASS FILTERING TO IMPROVE INTRASCAN DYNAMIC RANGE | (51) H01L 21/20                                                                                                                                                           |
| SINJONIA, Manish                                                     | (73) DH Technologies Development Pte. Ltd.                                                                          | (11) EP3062335                                                                                                                                                            |
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| (51) H01J 1/13                                                       | (32) 03.06.2011                                                                                                     | (54) METHOD OF INTERCALATING AN INSULATING LAYER BETWEEN A METAL LAYER AND A GRAPHENE LAYER AND METHOD OF FABRICATING SEMICONDUCTOR DEVICE USING THE INTERCALATION METHOD |
| H01J 19/16                                                           | (33) United States of America                                                                                       | (73) Samsung Electronics Co., Ltd.                                                                                                                                        |
| H01J 23/04                                                           | (51) H01J 49/00                                                                                                     | (72) JEON, Insu                                                                                                                                                           |
| H01J 25/34                                                           | (11) EP2831903                                                                                                      | KU, Jiyeon                                                                                                                                                                |
| H03B 9/08                                                            | (21) EP13713486.2                                                                                                   | KIM, Hyowon                                                                                                                                                               |
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| (54) HIGH-FREQUENCY CIRCUIT SYSTEM AND HEATER VOLTAGE CONTROL METHOD | (54) MASS SPECTROMETER                                                                                              | (11) EP3352199                                                                                                                                                            |
| (73) NEC Network and Sensor Systems, Ltd.                            | (73) Micromass UK Limited                                                                                           | (21) EP17202493.7                                                                                                                                                         |
| (72) CHIBA, Akira                                                    | (72) PLATT, Stephen John                                                                                            | (47) 14.07.2021                                                                                                                                                           |
| NAKAZATO, Yukihira                                                   | RICHARDSON, Keith George                                                                                            | (22) 20.11.2017                                                                                                                                                           |
| (31) 2007070519                                                      | WILLIAMS, David Darrell                                                                                             | (54) III-N BASED SUBSTRATE FOR POWER ELECTRONIC DEVICES AND METHOD FOR MANUFACTURING SAME                                                                                 |
| (32) 19.03.2007                                                      | DENNY, Richard                                                                                                      | (73) IMEC vzw                                                                                                                                                             |
| (33) Japan                                                           | (31) 201205805                                                                                                      | (72) ZHAO, Ming                                                                                                                                                           |
| (51) H01J 1/62                                                       | (32) 30.03.2012                                                                                                     | (31) 17152589                                                                                                                                                             |
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| (54) LIGHT EMITTING DEVICE INCLUDING SEMICONDUCTOR NANOCRYSTALS      | H01L 33/32                                                                                                          | (11) EP2095405                                                                                                                                                            |
| (73) Massachusetts Institute of Technology                           | (11) EP2624283                                                                                                      | (21) EP07851981.6                                                                                                                                                         |
| (72) CHEN, Jianglong                                                 | (21) EP11814741.2                                                                                                   |                                                                                                                                                                           |
| BULOVIC, Vladimir                                                    | (47) 07.07.2021                                                                                                     |                                                                                                                                                                           |
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| (73) REC Solar Norway AS                     | (22) 02.03.2020                           | (33) Japan                         |
| (72) ENEBAKK, Erik                           | (54) STACKED HIGH-BLOCKING-VOLTAGE        | (51) H01L 21/48                    |
| PETER, Kristian                              | III-V POWER SEMICONDUCTOR                 | H01L 23/495                        |
| RAABE, Bernd                                 | DIODE                                     | H01L 25/07                         |
| TRONSTAD, Ragnar                             | (73) 3-5 Power Electronics GmbH           | (11) EP2639828                     |
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| (47) 07.07.2021                              | H01L 29/47                                | Michels, Daniel                    |
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| (54) METHOD OF PROTECTING A SILICIDE         | (47) 07.07.2021                           | (31) 102012204006                  |
| LAYER                                        | (87) US2017027779                         | (32) 14.03.2012                    |
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| (72) POSSEME, Nicolas                        | (54) HIGH-VOLTAGE LATERAL GAN-ON-         | H01L 21/66                         |
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| (32) 20.11.2013                              | (73) MACOM Technology Solutions Holdings, | H01L 23/00                         |
| (33) France                                  | Inc.                                      | H01L 23/12                         |
| (51) H01L 21/288                             | (72) KALETA, Anthony                      | H01L 23/31                         |
| H01L 21/60                                   | CARLSON, Douglas                          | H01L 23/367                        |
| H01L 21/768                                  | BOLES, Timothy, E.                        | H01L 23/48                         |
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| 01.10.2015                                   | 29.07.2016                                | 31.01.2013                         |
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| (54) THROUGH-BODY VIA FORMATION              | United States of America                  | (54) SEMICONDUCTOR DIE ASSEMBLIES, |
| TECHNIQUES                                   | United States of America                  | SEMICONDUCTOR DEVICES              |
| (73) Intel Corporation                       | United States of America                  | INCLUDING SAME, AND METHODS OF     |
| (72) LEE, Kevin, J.                          | (51) H01L 21/336                          | FABRICATION                        |
| (51) H01L 21/306                             | H01L 21/8234                              | (73) Micron Technology, Inc.       |
| H01L 21/31                                   | H01L 27/088                               | (72) ENGLAND, Luke G.              |
| H01L 21/312                                  | H01L 27/10                                | SILVESTRI, Paul A.                 |
| H01L 21/316                                  | H01L 29/788                               | KOOPMANS, Michel                   |
| H01L 21/683                                  | H01L 29/792                               | (31) 201113192014                  |
| H01L 21/687                                  | H01L 27/115                               | (32) 27.07.2011                    |
| H02J 50/12                                   | H01L 27/11531                             | (33) United States of America      |
| (11) EP3432351                               | H01L 27/11546                             | (51) H01L 21/56                    |
| (21) EP17785744.8                            | (11) EP3208831                            | H01L 33/50                         |
| (47) 14.07.2021                              | (21) EP15850113.0                         | H01L 33/62                         |
| (87) JP2017012792                            | (47) 07.07.2021                           | (11) EP3664167                     |
| 26.10.2017                                   | (87) JP2015078335                         | (21) EP20153837.8                  |
| (22) 29.03.2017                              | 21.04.2016                                | (47) 07.07.2021                    |
| (54) CONTACTLESS ELECTRIC POWER              | (22) 06.10.2015                           | (22) 23.03.2012                    |
| SUPPLY MECHANISM AND METHOD                  | (54) METHOD FOR PRODUCING                 | (54) LIGHT EMITTING DIODE          |
| FOR ROTARY TABLE, AND WAFER                  | SEMICONDUCTOR INTEGRATED                  | (73) Samsung Electronics Co., Ltd. |
| ROTATING AND HOLDING DEVICE                  | CIRCUIT DEVICES, AND                      | (72) KIM, Hak Hwan                 |
| (73) Mimasu Semiconductor Industry Co., Ltd. | SEMICONDUCTOR INTEGRATED                  | KIM, Min Jung                      |
| (72) TSUCHIYA, Masato                        | CIRCUIT DEVICE                            | MOON, Kyung Mi                     |
| (31) 2016085365                              | (73) Floadia Corporation                  | SONG, Jong Sup                     |
| (32) 21.04.2016                              | (72) TANIGUCHI Yasuhiro                   | YOU, Jae Sung                      |
| (33) Japan                                   | KAWASHIMA Yasuhiko                        | CHOI, Ill Heoung                   |
| (51) H01L 21/329                             | KASAI Hideo                               | YOO, Cheol, Jun                    |

|                                           |                                           |                                               |
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| (31) 20110027021                          | (33) United States of America             | (47) 07.07.2021                               |
| 20110027033                               | (51) H01L 23/00                           | (22) 19.02.2019                               |
| 20110104223                               | H01L 23/057                               | (54) REMOTE HEAT EXCHANGER                    |
| (32) 25.03.2011                           | H01L 23/10                                | (73) Quanta Computer Inc.                     |
| 25.03.2011                                | H05K 3/34                                 | (72) CHEN, Chao-Jung                          |
| 12.10.2011                                | (11) EP2738798                            | HUANG, Yu-Nien                                |
| (33) Korea (Republic)                     | (21) EP12817380.4                         | CHEN, Ching-Yu                                |
| Korea (Republic)                          | (47) 14.07.2021                           | FANG, Erh-Kai                                 |
| Korea (Republic)                          | (87) JP2012068436                         | (31) 201862676075 P                           |
| (51) H01L 21/67                           | 31.01.2013                                | 201816114962                                  |
| H01L 21/677                               | (22) 20.07.2012                           | (32) 24.05.2018                               |
| (11) EP2812915                            | (54) PACKAGE FOR ACCOMMODATING            | 28.08.2018                                    |
| (21) EP13709538.6                         | SEMICONDUCTOR ELEMENT,                    | (33) United States of America                 |
| (47) 07.07.2021                           | SEMICONDUCTOR DEVICE PROVIDED             | United States of America                      |
| (87) IB2013050414                         | WITH SAME, AND ELECTRONIC                 | (51) H01L 23/367                              |
| 15.08.2013                                | DEVICE                                    | H01L 23/433                                   |
| (22) 17.01.2013                           | (73) Kyocera Corporation                  | (11) EP3226289                                |
| (54) SUBSTRATE TREATMENT SYSTEM           | (72) TSUJINO, Mahiro                      | (21) EP17161074.4                             |
| (73) Meyer Burger (Germany) GmbH          | MIYAHARA, Manabu                          | (47) 14.07.2021                               |
| (72) MAI, Joachim                         | (31) 2011163426                           | (22) 15.03.2017                               |
| KEHR, Mirko                               | (32) 26.07.2011                           | (54) ELECTRONICAL DEVICE WITH A               |
| (31) 102012100929                         | (33) Japan                                | THERMAL DISSIPATION ELEMENT                   |
| (32) 06.02.2012                           | (51) H01L 23/14                           | (73) Commissariat à l'énergie atomique et aux |
| (33) Germany                              | H01L 23/498                               | énergies alternatives                         |
| (51) H01L 21/673                          | H01L 23/538                               | STMicroelectronics (Crolles 2) SAS            |
| (11) EP3234991                            | H01L 25/065                               | STMICROELECTRONICS SA                         |
| (21) EP15871182.0                         | H01L 25/18                                | (72) PRIETO HERRERA, Rafael                   |
| (47) 07.07.2021                           | (11) EP2812919                            | COLONNA, Jean-Philippe                        |
| (87) US2015066724                         | (21) EP12816386.2                         | COUDRAIN, Perceval                            |
| 23.06.2016                                | (47) 07.07.2021                           | (31) 1652720                                  |
| (22) 18.12.2015                           | (87) US2012067543                         | (32) 30.03.2016                               |
| (54) WAFER CONTAINER WITH SHOCK           | 15.08.2013                                | (33) France                                   |
| CONDITION PROTECTION                      | (22) 03.12.2012                           | (51) H01L 23/48                               |
| (73) Entegris, Inc.                       | (54) STACKED DIE ASSEMBLY WITH            | H01L 25/065                                   |
| (72) MUSHEL, Ryan                         | MULTIPLE INTERPOSERS                      | (11) EP2815429                                |
| STEFFENS, Jason, T.                       | (73) Xilinx, Inc.                         | (21) EP13749252.6                             |
| (31) 201462093908 P                       | (72) WU, Ephrem, C.                       | (47) 07.07.2021                               |
| (32) 18.12.2014                           | BANIJAMALI, Bahareh                       | (87) US2013026223                             |
| (33) United States of America             | CHAWARE, Raghunandan                      | 22.08.2013                                    |
| (51) H01L 21/68                           | (31) 201213369215                         | (22) 14.02.2013                               |
| H01L 21/687                               | 201213399939                              | (54) MULTI-CHIP MODULE COMPRISING             |
| (11) EP3093879                            | (32) 08.02.2012                           | A COMPRESSIBLE STRUCTURE                      |
| (21) EP15167537.8                         | 17.02.2012                                | AND METHOD FOR MAINTAINING                    |
| (47) 07.07.2021                           | (33) United States of America             | ALIGNMENT IN A MULTI-CHIP                     |
| (22) 13.05.2015                           | United States of America                  | MODULE USING A COMPRESSIBLE                   |
| (54) END EFFECTOR OF A WAFER              | (51) H01L 23/31                           | STRUCTURE                                     |
| HANDLING SYSTEM AND WAFER                 | H01L 23/495                               | (73) Oracle International Corporation         |
| HANDLING SYSTEM                           | H01L 25/11                                | (72) THACKER, Hiren D.                        |
| (73) Integrated Dynamics Engineering GmbH | (11) EP3007227                            | YANG, Hyung Suk                               |
| (72) Birkner, Andreas                     | (21) EP15185158.1                         | SHUBIN, Ivan                                  |
| (51) H01L 21/768                          | (47) 14.07.2021                           | CUNNINGHAM, John E.                           |
| H01L 23/532                               | (22) 15.09.2015                           | (31) 201213397593                             |
| (11) EP3050081                            | (54) COMPACT POWER SEMICONDUCTOR          | (32) 15.02.2012                               |
| (21) EP14849833.0                         | PACKAGE                                   | (33) United States of America                 |
| (47) 07.07.2021                           | (73) Infineon Technologies Americas Corp. | (51) H01L 23/498                              |
| (87) US2014057351                         | (72) CHO, Eung San                        | H01L 23/50                                    |
| 02.04.2015                                | CHEAH, Chuan                              | H01L 23/538                                   |
| (22) 25.09.2014                           | (31) 201462061479 P                       | (11) EP3309828                                |
| (54) INTERCONNECT WIRES INCLUDING         | 201514849178                              | (21) EP17190758.7                             |
| RELATIVELY LOW RESISTIVITY                | (32) 08.10.2014                           | (47) 07.07.2021                               |
| CORES                                     | 09.09.2015                                | (22) 13.09.2017                               |
| (73) Intel Corporation                    | (33) United States of America             | (54) SYSTEM IN PACKAGE, AND SYSTEM            |
| (72) YOO, Hui Jae                         | United States of America                  | IN PACKAGE FOR VEHICLE                        |
| INDUKURI, Tejaswi K.                      | (51) H01L 23/367                          | (73) Renesas Electronics Corporation          |
| CHEBIAM, Ramanan V.                       | H01L 23/427                               | (72) BETSUI, Takafumi                         |
| CLARKE, James S.                          | H05K 7/20                                 | (31) 2016188185                               |
| (31) 201314038502                         | (11) EP3573438                            | (32) 27.09.2016                               |
| (32) 26.09.2013                           | (21) EP19157947.3                         | (33) Japan                                    |



|                                     |                                      |                                    |
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| (51) H01L 23/525                    | (33) Germany                         | (22) 19.03.2012                    |
| H01L 23/538                         | (51) H01L 25/07                      | (54) LIGHT EMITTING DEVICE PACKAGE |
| H02H 3/087                          | H01L 25/18                           | (73) LG Innotek Co., Ltd.          |
| H03K 17/12                          | H02M 7/48                            | (72) LEE, Dong Yong                |
| H05K 1/02                           | (11) EP3258589                       | (31) 20110064097                   |
| H05K 3/28                           | (21) EP16748778.4                    | (32) 29.06.2011                    |
| (11) EP3544055                      | (47) 07.07.2021                      | (33) Korea (Republic)              |
| (21) EP19161971.7                   | (87) IB2016000078                    | (51) H01L 27/02                    |
| (47) 07.07.2021                     | 18.08.2016                           | H01L 29/06                         |
| (22) 11.03.2019                     | (22) 03.02.2016                      | H01L 29/78                         |
| (54) ELECTRICAL SWITCHING APPARATUS | (54) CIRCUIT MODULE AND INVERTER     | (11) EP3246951                     |
| AND METHOD FOR PRODUCING AN         | DEVICE USING SAME                    | (21) EP17169363.3                  |
| ELECTRICAL SWITCHING APPARATUS      | (73) Panasonic Intellectual Property | (47) 07.07.2021                    |
| (73) LEONI Bordnetz-Systeme GmbH    | Management Co., Ltd.                 | (22) 04.05.2017                    |
| (72) Ionel, Butar                   | (72) GOTO, Shusaku                   | (54) SEMICONDUCTOR STRUCTURE       |
| (31) 102018204180                   | IWAMATSU, Yusuke                     | (73) MediaTek Inc.                 |
| (32) 19.03.2018                     | YOSHITAKE, Akira                     | (72) WANG, Yu-Jen                  |
| (33) Germany                        | (31) 2015024424                      | HUANG, Kuo-En                      |
| (51) H01L 23/538                    | (32) 10.02.2015                      | (31) 201662339123 P                |
| H01L 23/64                          | (33) Japan                           | 201662382288 P                     |
| H01L 25/07                          | (51) H01L 25/07                      | 201715493199                       |
| H01L 25/16                          | H02G 5/00                            | (32) 20.05.2016                    |
| H02M 7/00                           | H02M 7/00                            | 01.09.2016                         |
| H03K 17/041                         | H05K 7/14                            | 21.04.2017                         |
| (11) EP3063859                      | H02M 7/48                            | (33) United States of America      |
| (21) EP14859039.1                   | (11) EP3611835                       | United States of America           |
| (47) 14.07.2021                     | (21) EP18784808.0                    | United States of America           |
| (87) US2014055020                   | (47) 14.07.2021                      | (51) H01L 27/10                    |
| 07.05.2015                          | (87) JP2018014189                    | H01L 27/105                        |
| (22) 10.09.2014                     | 18.10.2018                           | H01L 27/108                        |
| (54) HALF BRIDGE CIRCUIT            | (22) 03.04.2018                      | H01L 27/12                         |
| (73) HRL Laboratories, LLC          | (54) ELECTRIC POWER CONVERSION       | H01L 29/78                         |
| (72) HUGHES, Brian                  | DEVICE                               | (11) EP2548227                     |
| BOUTROS, Karim S.                   | (73) Panasonic Intellectual Property | (21) EP11756798.2                  |
| ZEHNDER, Daniel M.                  | Management Co., Ltd.                 | (47) 14.07.2021                    |
| KHALIL, Sameh G.                    | (72) OKAURA Shingo                   | (87) US2011028323                  |
| CHU, Rongming                       | KAZAMA Shun                          | 22.09.2011                         |
| (31) 201314065715                   | MONDEN Takashi                       | (22) 14.03.2011                    |
| (32) 29.10.2013                     | (31) 2017080179                      | (54) TECHNIQUES FOR PROVIDING A    |
| (33) United States of America       | (32) 14.04.2017                      | SEMICONDUCTOR MEMORY DEVICE        |
| (51) H01L 23/538                    | (33) Japan                           | (73) Micron Technology, Inc.       |
| H05K 1/02                           | (51) H01L 25/075                     | (72) BANNA, Srinivasa, Rao         |
| H05K 1/18                           | H01L 33/52                           | VAN BUSKIRK, Michael, A.           |
| H05K 3/46                           | (11) EP3536129                       | THURGATE, Timothy, J.              |
| (11) EP3474639                      | (21) EP17867186.3                    | (31) 313986 P                      |
| (21) EP17197559.2                   | (47) 07.07.2021                      | (32) 15.03.2010                    |
| (47) 14.07.2021                     | (87) KR2017011323                    | (33) United States of America      |
| (22) 20.10.2017                     | 11.05.2018                           | (51) H01L 27/146                   |
| (54) EMBEDDING A COMPONENT INTO     | (22) 13.10.2017                      | (11) EP2845229                     |
| A COMPONENT CARRIER BY              | (54) TRANSPARENT LIGHT-EMITTING      | (21) EP13726287.9                  |
| TRANSFERRING THE COMPONENT          | DIODE FILM                           | (47) 07.07.2021                    |
| INTO A CAVITY BEING ALREADY         | (73) LG Electronics Inc.             | (87) IB2013052980                  |
| FILLED WITH FILLING MATERIAL        | (72) HONG, Daewoon                   | 07.11.2013                         |
| (73) AT & S Austria Technologie &   | PARK, Sangtae                        | (22) 15.04.2013                    |
| Systemtechnik Aktiengesellschaft    | CHOI, Jeongsik                       | (54) IMAGING DETECTOR WITH         |
| (72) Ifis, Abderrazzaq              | YOON, Dongjin                        | ANTI-ALIASING FILTER IN THE        |
| Schrittwieser, Wolfgang             | (31) 20160144453                     | READOUT ELECTRONICS AND/OR         |
| (51) H01L 23/552                    | 20160144455                          | PHOTOSENSOR                        |
| H05K 9/00                           | (32) 01.11.2016                      | (73) Koninklijke Philips N.V.      |
| (11) EP3300472                      | 01.11.2016                           | (72) CHAPPO, Marc Anthony          |
| (21) EP17191571.3                   | (33) Korea (Republic)                | LUHTA, Randall Peter               |
| (47) 14.07.2021                     | Korea (Republic)                     | (31) 201261640029 P                |
| (22) 18.09.2017                     | (51) H01L 25/16                      | (32) 30.04.2012                    |
| (54) ELECTRICAL COMPONENT           | H01L 33/62                           | (33) United States of America      |
| (73) Continental Automotive GmbH    | H01L 33/64                           | (51) H01L 27/146                   |
| (72) Zimmer, Horst                  | (11) EP3309835                       | (11) EP3522217                     |
| (31) 102016218266                   | (21) EP17204875.3                    | (21) EP16917204.6                  |
| (32) 22.09.2016                     | (47) 14.07.2021                      | (47) 14.07.2021                    |

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| (87) CN2016100865                                                                                                               | (11) EP3086373                                                  | (32) 02.11.2011                                                                  |
| 05.04.2018                                                                                                                      | (21) EP16167857.8                                               | (33) United States of America                                                    |
| (22) 29.09.2016                                                                                                                 | (47) 14.07.2021                                                 | (51) H01L 31/02                                                                  |
| (54) METHOD TO PREPARE PIXEL FOR UNCOOLED INFRARED FOCAL PLANE DETECTOR                                                         | (22) 23.09.2014                                                 | H01L 51/42                                                                       |
| (73) Yantai Raytron Technology Co., Ltd.                                                                                        | (54) ORGANIC LIGHT EMITTING DISPLAY DEVICE                      | H01L 25/04                                                                       |
| (72) WANG, Hongchen                                                                                                             | (73) LG Display Co., Ltd.                                       | H01L 31/043                                                                      |
| QIU, Dong                                                                                                                       | (72) PARK, Kwangmo                                              | H02S 50/10                                                                       |
| WANG, Peng                                                                                                                      | SHIM, Jongsik                                                   | (11) EP3577695                                                                   |
| CHEN, Wenli                                                                                                                     | PARK, Hyojin                                                    | (21) EP18713574.4                                                                |
| (51) H01L 27/146                                                                                                                | (31) 20130116844                                                | (47) 14.07.2021                                                                  |
| H01L 31/107                                                                                                                     | (32) 30.09.2013                                                 | (87) EP2018055499                                                                |
| H01L 31/18                                                                                                                      | (33) Korea (Republic)                                           | 13.09.2018                                                                       |
| (11) EP2320464                                                                                                                  | (51) H01L 27/32                                                 | (22) 06.03.2018                                                                  |
| (21) EP10189833.6                                                                                                               | H01L 51/52                                                      | (54) PHOTOVOLTAIC DEVICE                                                         |
| (47) 07.07.2021                                                                                                                 | G09G 3/3225                                                     | (73) Siemens Energy Global GmbH & Co. KG                                         |
| (22) 03.11.2010                                                                                                                 | (11) EP3496082                                                  | (72) FLEISCHER, Maximilian                                                       |
| (54) Photodiode array, method for manufacturing photodiode array, epitaxial wafer, and method for manufacturing epitaxial wafer | (21) EP19150928.0                                               | SCHNETTLER, Armin                                                                |
| (73) Sumitomo Electric Industries, Ltd.                                                                                         | (47) 14.07.2021                                                 | (31) 102017203809                                                                |
| (72) Akita, Katsushi                                                                                                            | (22) 17.12.2014                                                 | 102017205524                                                                     |
| Ishizuka, Takashi                                                                                                               | (54) FLEXIBLE DISPLAY DEVICE                                    | (32) 08.03.2017                                                                  |
| Fujii, Kei                                                                                                                      | (73) LG Display Co., Ltd.                                       | 31.03.2017                                                                       |
| Nagai, Youichi                                                                                                                  | (72) LEE, Ho Young                                              | (33) Germany                                                                     |
| Nakahata, Hideaki                                                                                                               | KANG, ChangHeon                                                 | Germany                                                                          |
| (31) 2009252951                                                                                                                 | (31) 20130169271                                                | (51) H01L 31/0224                                                                |
| (32) 04.11.2009                                                                                                                 | (32) 31.12.2013                                                 | H01L 31/0216                                                                     |
| (33) Japan                                                                                                                      | (33) Korea (Republic)                                           | (11) EP3682485                                                                   |
| (51) H01L 27/32                                                                                                                 | (51) H01L 29/06                                                 | (21) EP18780187.3                                                                |
| (11) EP3203519                                                                                                                  | H01L 29/49                                                      | (47) 07.07.2021                                                                  |
| (21) EP15791466.4                                                                                                               | H01L 29/786                                                     | (87) FR2018052230                                                                |
| (47) 14.07.2021                                                                                                                 | (11) EP3054486                                                  | 21.03.2019                                                                       |
| (87) CN2015070846                                                                                                               | (21) EP15153822.0                                               | (22) 12.09.2018                                                                  |
| 07.04.2016                                                                                                                      | (47) 07.07.2021                                                 | (54) PROCESS FOR MANUFACTURING A HOMOJUNCTION PHOTOVOLTAIC CELL                  |
| (22) 16.01.2015                                                                                                                 | (22) 04.02.2015                                                 | (73) Commissariat à l'Energie Atomique et aux Energies Alternatives              |
| (54) ARRAY SUBSTRATE, METHOD OF MANUFACTURING THE ARRAY SUBSTRATE USING A MASK PLATE AND DISPLAY DEVICE                         | (54) A field-effect apparatus, associated apparatus and methods | (72) CABAL, Raphaël                                                              |
| (73) BOE Technology Group Co., Ltd.                                                                                             | (73) Nokia Technologies Oy                                      | (31) 1758559                                                                     |
| Ordos Yuansheng Optoelectronics Co., Ltd.                                                                                       | (72) Haque, MD Samiul                                           | (32) 15.09.2017                                                                  |
| (72) BAI, Shanshan                                                                                                              | (51) H01L 29/417                                                | (33) France                                                                      |
| JI, Fengli                                                                                                                      | H01L 29/423                                                     | (51) H01L 31/0224                                                                |
| XUAN, Minghua                                                                                                                   | H01L 29/74                                                      | H01L 31/0465                                                                     |
| LIU, Jiantao                                                                                                                    | H01L 29/747                                                     | (11) EP3516703                                                                   |
| XU, Jingbo                                                                                                                      | (11) EP3226303                                                  | (21) EP17787046.6                                                                |
| (31) 201410515822                                                                                                               | (21) EP16184603.5                                               | (47) 14.07.2021                                                                  |
| (32) 29.09.2014                                                                                                                 | (47) 07.07.2021                                                 | (87) NL2017050637                                                                |
| (33) China                                                                                                                      | (22) 17.08.2016                                                 | 29.03.2018                                                                       |
| (51) H01L 27/32                                                                                                                 | (54) POWER COMPONENT PROTECTED AGAINST OVERHEATING              | (22) 25.09.2017                                                                  |
| (11) EP3331022                                                                                                                  | (73) STMicroelectronics (Tours) SAS                             | (54) THIN FILM PHOTOVOLTAIC MODULE                                               |
| (21) EP17204698.9                                                                                                               | (72) MENARD, Samuel                                             | (73) Nederlandse Organisatie voor toegepast-natuurwetenschappelijk onderzoek TNO |
| (47) 14.07.2021                                                                                                                 | (31) 1652822                                                    | (72) JANSEN, Markus Johan                                                        |
| (22) 30.11.2017                                                                                                                 | (32) 31.03.2016                                                 | (31) 2017527                                                                     |
| (54) ORGANIC LIGHT EMITTING DISPLAY                                                                                             | (33) France                                                     | (32) 26.09.2016                                                                  |
| (73) LG Display Co., Ltd.                                                                                                       | (51) H01L 29/66                                                 | (33) Netherlands                                                                 |
| (72) KIM, Yong-Min                                                                                                              | H01L 29/78                                                      | (51) H01L 31/028                                                                 |
| CHO, Woo-Chan                                                                                                                   | H01L 29/94                                                      | H01L 31/18                                                                       |
| PARK, Eun-Young                                                                                                                 | (11) EP2590221                                                  | H01L 31/068                                                                      |
| (31) 20160161363                                                                                                                | (21) EP12005816.9                                               | H01L 31/0475                                                                     |
| (32) 30.11.2016                                                                                                                 | (47) 14.07.2021                                                 | H01L 31/048                                                                      |
| (33) Korea (Republic)                                                                                                           | (22) 10.08.2012                                                 | H01L 31/05                                                                       |
| (51) H01L 27/32                                                                                                                 | (54) Finfet devices                                             | (11) EP3123528                                                                   |
| H01L 51/52                                                                                                                      | (73) Avago Technologies International Sales Pte. Limited        | (21) EP15769730.1                                                                |
|                                                                                                                                 | (72) Chen, Xiangdong                                            | (47) 14.07.2021                                                                  |
|                                                                                                                                 | Woo, Agnes                                                      | (87) US2015022338                                                                |
|                                                                                                                                 | Chen, Henry                                                     | 01.10.2015                                                                       |
|                                                                                                                                 | Xia, Wei                                                        | (22) 24.03.2015                                                                  |
|                                                                                                                                 | (31) 201113287331                                               |                                                                                  |

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|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| (54) SOLAR CELL HAVING A PLURALITY OF SUB-CELLS COUPLED BY A METALLIZATION STRUCTURE  | BASED ON INDIRECT BAND-GAP SEMICONDUCTOR NANOCRYSTALS                                       | (51) H01L 33/00                                                     |
| (73) SunPower Corporation                                                             | (73) Università degli Studi di Milano - Bicocca                                             | H01L 33/02                                                          |
| (72) HARLEY, Gabriel                                                                  | (72) BROVELLI, Sergio                                                                       | H01L 33/14                                                          |
| MORSE, Michael                                                                        | MEINARDI, Francesco                                                                         | H01L 33/22                                                          |
| COUSINS, Peter John                                                                   | (31) UA20162918                                                                             | H01L 33/32                                                          |
| (31) 201414229543                                                                     | (32) 27.04.2016                                                                             | (11) EP3567643                                                      |
| (32) 28.03.2014                                                                       | (33) Italy                                                                                  | (21) EP19163745.3                                                   |
| (33) United States of America                                                         | (51) H01L 31/054                                                                            | (47) 14.07.2021                                                     |
| (51) H01L 31/0368                                                                     | H02S 40/22                                                                                  | (22) 19.03.2019                                                     |
| H01L 31/18                                                                            | H02S 40/44                                                                                  | (54) LIGHT EMITTING DIODE ELEMENT AND METHOD FOR MANUFACTURING SAME |
| H01L 31/068                                                                           | F24S 10/40                                                                                  | (73) Panasonic Intellectual Property Management Co., Ltd.           |
| H01L 31/0747                                                                          | F24S 23/70                                                                                  | (72) OHNO, Hiroshi                                                  |
| (11) EP2472592                                                                        | F24S 23/72                                                                                  | YAMASHITA, Kenya                                                    |
| (21) EP11165675.7                                                                     | F24S 23/74                                                                                  | (31) 2018092360                                                     |
| (47) 07.07.2021                                                                       | F24S 23/79                                                                                  | (32) 11.05.2018                                                     |
| (22) 11.05.2011                                                                       | F24S 80/50                                                                                  | (33) Japan                                                          |
| (54) Solar cell and method of fabricating the same                                    | (11) EP3531040                                                                              | (51) H01L 33/00                                                     |
| (73) AU Optronics Corporation                                                         | (21) EP19160184.8                                                                           | H01L 33/20                                                          |
| (72) Hu, Yen-Cheng                                                                    | (47) 14.07.2021                                                                             | H01L 33/24                                                          |
| Li, Hsin-Feng                                                                         | (22) 14.08.2015                                                                             | H01L 33/30                                                          |
| Wu, Zhen-Cheng                                                                        | (54) DUAL-STAGE PARABOLIC CONCENTRATOR                                                      | (11) EP2943985                                                      |
| (31) 099147033                                                                        | (73) Lakshmanan, Karthigeyane                                                               | (21) EP13824031.2                                                   |
| (32) 30.12.2010                                                                       | Lakshmanan, Rajaganapathy                                                                   | (47) 07.07.2021                                                     |
| (33) Taiwan, Province of China                                                        | (72) Lakshmanan, Karthigeyane                                                               | (87) IB2013061038                                                   |
| (51) H01L 31/0392                                                                     | Lakshmanan, Rajaganapathy                                                                   | 17.07.2014                                                          |
| H01L 31/048                                                                           | (51) H01L 31/054                                                                            | (22) 17.12.2013                                                     |
| H01L 31/049                                                                           | H02S 40/44                                                                                  | (54) SHAPED LED FOR ENHANCED LIGHT EXTRACTION EFFICIENCY            |
| (11) EP3424083                                                                        | (11) EP3408869                                                                              | (73) Lumileds LLC                                                   |
| (21) EP17711312.3                                                                     | (21) EP16720454.4                                                                           | (72) TURCOTTE, Stéphane                                             |
| (47) 14.07.2021                                                                       | (47) 14.07.2021                                                                             | WU, Songnan                                                         |
| (87) IB2017000181                                                                     | (87) FR2016050765                                                                           | (31) 201361749941 P                                                 |
| 08.09.2017                                                                            | 06.10.2016                                                                                  | (32) 08.01.2013                                                     |
| (22) 24.02.2017                                                                       | (22) 04.04.2016                                                                             | (33) United States of America                                       |
| (54) FLEXIBLE PHOTOVOLTAIC APPARATUS WITH MULTI-LAYERED SUBSTRATE                     | (54) PHOTOVOLTAIC AND THERMAL SOLAR PANEL                                                   | (51) H01L 33/00                                                     |
| (73) Flisom AG                                                                        | (73) Dualsun                                                                                | H01L 33/22                                                          |
| (72) PERRENOUD, Julian Christoph                                                      | (72) BROTTIER, Laetitia                                                                     | H01L 33/38                                                          |
| (31) 201662302792 P                                                                   | MOUTERDE, Jérôme                                                                            | (11) EP3627569                                                      |
| (32) 02.03.2016                                                                       | (31) 1552907                                                                                | (21) EP19198198.4                                                   |
| (33) United States of America                                                         | (32) 03.04.2015                                                                             | (47) 14.07.2021                                                     |
| (51) H01L 31/05                                                                       | (33) France                                                                                 | (22) 19.09.2019                                                     |
| (11) EP3648178                                                                        | (51) H01L 31/18                                                                             | (54) METHOD OF MANUFACTURING SEMICONDUCTOR ELEMENT                  |
| (21) EP19169922.2                                                                     | H01L 31/048                                                                                 | (73) Nichia Corporation                                             |
| (47) 14.07.2021                                                                       | (11) EP3416200                                                                              | (72) HASHIZUME, Kenji                                               |
| (22) 17.04.2019                                                                       | (21) EP17840709.4                                                                           | MURAMOTO, Eiji                                                      |
| (54) METHODS OF FORMING A COLORED CONDUCTIVE RIBBON FOR INTEGRATION IN A SOLAR MODULE | (47) 14.07.2021                                                                             | NIKI, Nobuyoshi                                                     |
| (73) Flex, Ltd.                                                                       | (87) CN2017072149                                                                           | (31) 2018176121                                                     |
| (72) ZHOU, Lisong                                                                     | 22.02.2018                                                                                  | (32) 20.09.2018                                                     |
| ZHANG, Zhixun                                                                         | (22) 23.01.2017                                                                             | (33) Japan                                                          |
| ZHOU, Huaming                                                                         | (54) PACKAGING MATERIAL FOR PHOTOVOLTAIC MODULE AND METHOD FOR PREPARING PACKAGING MATERIAL | (51) H01L 33/48                                                     |
| (31) 201811140595                                                                     | (73) Tiger New Surface Materials (Suzhou) Co., Ltd.                                         | H01L 33/50                                                          |
| (32) 31.10.2018                                                                       | Sunman (Shanghai) Co., Ltd.                                                                 | H01L 33/60                                                          |
| (33) China                                                                            | (72) DAI, Tianhe                                                                            | (11) EP3695442                                                      |
| (51) H01L 31/054                                                                      | LUO, Biao                                                                                   | (21) EP18789303.7                                                   |
| (11) EP3449511                                                                        | WANG, Zhicheng                                                                              | (47) 07.07.2021                                                     |
| (21) EP17718107.0                                                                     | LONG, Guozhu                                                                                | (87) US2018054922                                                   |
| (47) 07.07.2021                                                                       | LIU, Jiaoyan                                                                                | 18.04.2019                                                          |
| (87) EP2017059659                                                                     | LIAN, Chengrong                                                                             | (22) 09.10.2018                                                     |
| 02.11.2017                                                                            | WANG, Weili                                                                                 | (54) LIGHT EMITTING DEVICE INCLUDING CONVERTER CONFINEMENT          |
| (22) 24.04.2017                                                                       | (31) 201610685536                                                                           | (73) Lumileds LLC                                                   |
| (54) LARGE AREA LUMINESCENT SOLAR CONCENTRATOR                                        | (32) 18.08.2016                                                                             | (72) MORAN, Brendan                                                 |
|                                                                                       | (33) China                                                                                  | KOSOWSKY, Lex                                                       |
|                                                                                       |                                                                                             | (31) 201715729269                                                   |

|                                                |                                               |                                        |
|------------------------------------------------|-----------------------------------------------|----------------------------------------|
| 18152118                                       | (54) CONTROL CIRCUIT AND                      | (72) YOKOO, Takeshi                    |
| (32) 10.10.2017                                | METHOD FOR CONTROLLING A                      | SUZUKI, Youji                          |
| 17.01.2018                                     | PIEZOELECTRIC TRANSFORMER                     | AKAI, Yasuyuki                         |
| (33) United States of America                  | (73) TDK Electronics AG                       | (31) 2016115659                        |
| European Patent Office (EPO)                   | (72) Weigluni, Michael                        | (32) 09.06.2016                        |
| (51) H01L 35/22                                | (31) 102015119574                             | (33) Japan                             |
| H01L 35/34                                     | (32) 12.11.2015                               | (51) H01L 51/30                        |
| (11) EP3497729                                 | (33) Germany                                  | H01L 51/46                             |
| (21) EP17761192.8                              | (51) H01L 41/053                              | H01L 51/54                             |
| (47) 14.07.2021                                | H01L 41/08                                    | (11) EP3070756                         |
| (87) EP2017069925                              | A24F 40/05                                    | (21) EP16000415.6                      |
| 15.02.2018                                     | A24F 40/10                                    | (47) 14.07.2021                        |
| (22) 07.08.2017                                | A24F 40/48                                    | (22) 19.02.2016                        |
| (54) ELECTRIC POWER GENERATOR                  | (11) EP3685689                                | (54) SEMICONDUCTOR MIXTURES            |
| (73) Termo-IND S.A.                            | (21) EP19863964.3                             | COMPRISING NANOPARTICLES               |
| (72) MAGAGNIN, Luca                            | (47) 07.07.2021                               | (73) Raynergy Tek Inc.                 |
| IEFFA, Simona                                  | (87) CN2019110852                             | (72) Morse, Graham                     |
| ACCOGLI, Alessandra                            | 04.06.2020                                    | Lozman, Owen                           |
| PANZERI, Gabriele                              | (22) 12.10.2019                               | (31) 15000808                          |
| LIBERALE, Francesco                            | (54) E-LIQUID DISPENSING APPARATUS            | (32) 18.03.2015                        |
| TIRELLA, Vincenzo                              | FOR AN ELECTRONIC CIGARETTE                   | (33) European Patent Office (EPO)      |
| SUCCA, Luca                                    | AND E-LIQUID DISPENSING METHOD                | (51) H01L 51/50                        |
| BRUNETTI, Simone                               | (73) China Tobacco Yunnan Industrial Co., Ltd | H01L 51/56                             |
| (31) PCT/EP2016/069030                         | (72) Li, Tinghua                              | (11) EP2206176                         |
| (32) 10.08.2016                                | ZHU, Donglai                                  | (21) EP08719479.1                      |
| (33) World Intellectual Property Office (WIPO) | MAO, Deshou                                   | (47) 07.07.2021                        |
| (51) H01L 39/14                                | HAN, Yi                                       | (87) IB2008050696                      |
| H01L 39/24                                     | Li, Shoubo                                    | 30.04.2009                             |
| (11) EP3622565                                 | ZHANG, Xia                                    | (22) 27.02.2008                        |
| (21) EP18782534.4                              | GONG, Xiaowei                                 | (54) METHOD FOR LIGHTING               |
| (47) 07.07.2021                                | ZHAO, Wei                                     | (73) Koninklijke Philips N.V.          |
| (87) US2018032271                              | (31) 201811427667                             | (72) VERSCHUREN, Coen, A.              |
| 20.12.2018                                     | (32) 27.11.2018                               | LIFKA, Herbert                         |
| (22) 11.05.2018                                | (33) China                                    | DE KOK, Margreet                       |
| (54) LAMINATED HIGH TEMPERATURE                | (51) H01L 41/08                               | (31) 07119048                          |
| SUPERCONDUCTING WIRES HAVING                   | H01L 41/187                                   | (32) 23.10.2007                        |
| INCREASED ENGINEERING CURRENT                  | H01L 41/316                                   | (33) European Patent Office (EPO)      |
| DENSITIES                                      | (11) EP3364471                                | (51) H01L 51/52                        |
| (73) American Superconductor Corporation       | (21) EP16855387.3                             | H01L 51/56                             |
| (72) RUPICH, Martin W.                         | (47) 14.07.2021                               | (11) EP2752909                         |
| (31) 201715593835                              | (87) JP2016080105                             | (21) EP13797970.4                      |
| (32) 12.05.2017                                | 20.04.2017                                    | (47) 14.07.2021                        |
| (33) United States of America                  | (22) 11.10.2016                               | (87) KR2013004860                      |
| (51) H01L 39/16                                | (54) MULTILAYER SUBSTRATE WITH                | 05.12.2013                             |
| H02H 9/02                                      | PIEZOELECTRIC THIN FILM,                      | (22) 31.05.2013                        |
| H02M 1/32                                      | PIEZOELECTRIC THIN FILM ELEMENT               | (54) ORGANIC LIGHT-EMITTING DEVICE     |
| H02M 7/483                                     | AND METHOD FOR MANUFACTURING                  | AND METHOD FOR MANUFACTURING           |
| (11) EP3363055                                 | SAME                                          | SAME                                   |
| (21) EP15813736.4                              | (73) SUMITOMO CHEMICAL COMPANY,               | (73) LG Display Co., Ltd.              |
| (47) 14.07.2021                                | LIMITED                                       | (72) LEE, Jung Hyoung                  |
| (87) EP2015079112                              | (72) SHIBATA, Kenji                           | KANG, Minsoo                           |
| 15.06.2017                                     | WATANABE, Kazutoshi                           | OH, Ducksu                             |
| (22) 09.12.2015                                | HORIKIRI, Fumimasa                            | (31) 20120058923                       |
| (54) HIGH-ENERGY SURGE CURRENT                 | (31) 2015204179                               | (32) 31.05.2012                        |
| LIMITER                                        | (32) 16.10.2015                               | (33) Korea (Republic)                  |
| (73) Siemens Energy Global GmbH & Co. KG       | (33) Japan                                    | (51) H01M 2/16                         |
| (72) ECKEL, Hans-Günter                        | (51) H01L 51/00                               | H01M 10/0525                           |
| JUNGHANS, Christoph                            | H01L 51/30                                    | (11) EP3736880                         |
| SCHMITT, Daniel                                | (11) EP3471160                                | (21) EP19173617.2                      |
| (51) H01L 41/04                                | (21) EP17810063.2                             | (47) 07.07.2021                        |
| H02N 2/06                                      | (47) 14.07.2021                               | (22) 09.05.2019                        |
| H05B 41/282                                    | (87) JP2017018473                             | (54) SEPARATOR AND LITHIUM ION         |
| (11) EP3690967                                 | 14.12.2017                                    | BATTERY                                |
| (21) EP20164570.2                              | (22) 17.05.2017                               | (73) Ningde Amperex Technology Limited |
| (47) 14.07.2021                                | (54) COMPOSITION FOR                          | (72) XIAO, Liangzhen                   |
| (22) 11.11.2016                                | MANUFACTURING ORGANIC                         | WANG, Kefei                            |
|                                                | SEMICONDUCTOR DEVICES                         | ZENG, Qiao                             |
|                                                | (73) Daicel Corporation                       |                                        |

|                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) H01M 4/02<br>H01M 4/04<br>H01M 4/38<br>H01M 4/62<br>H01M 4/134<br>H01M 4/136<br>H01M 4/1395<br>H01M 4/1397<br>H01M 4/58<br>H01M 10/0525                                                                                                                                                                                            | (11) EP3534439<br>(21) EP18197086.4<br>(47) 07.07.2021<br>(22) 27.09.2018<br>(54) ELECTRODE MATERIAL FOR LITHIUM ION SECONDARY BATTERY, ELECTRODE FOR LITHIUM ION SECONDARY BATTERY, AND LITHIUM ION SECONDARY BATTERY                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | (51) H01M 4/20<br>H01M 4/62<br>H01M 4/73<br>(11) EP2390947<br>(21) EP11004328.8<br>(47) 07.07.2021<br>(22) 26.05.2011<br>(54) Lead-oxide battery plate with nonwoven glas mat                                                                                                                                                               |
| (11) EP3155676<br>(21) EP15724514.3<br>(47) 07.07.2021<br>(87) EP2015001021<br>17.12.2015<br>(22) 19.05.2015<br>(54) ELECTRODE MATERIAL FOR AN ELECTROCHEMICAL ACCUMULATOR, METHOD FOR PRODUCING AN ELECTRODE MATERIAL, AND ELECTROCHEMICAL ENERGY ACCUMULATOR                                                                          | (73) Sumitomo Osaka Cement Co., Ltd.<br>(72) NOZOE, Tsutomu<br>YAMAYA, Ryuuta<br>(31) 2018035176<br>(32) 28.02.2018<br>(33) Japan                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | (73) Johns Manville<br>(72) Obernyer, Kristin F.G.<br>Weller, David E.<br>(31) 788593<br>(32) 27.05.2010<br>(33) United States of America                                                                                                                                                                                                   |
| (73) Daimler AG<br>(72) HINTENNACH, Andreas<br>(31) 102014009554<br>(32) 12.06.2014<br>(33) Germany                                                                                                                                                                                                                                     | (51) H01M 4/134<br>H01M 10/052<br>H01M 10/0525<br>H01M 10/056<br>H01M 10/0562<br>H01M 50/409<br>(11) EP3227952<br>(21) EP15864779.2<br>(47) 07.07.2021<br>(87) US2015063234<br>09.06.2016<br>(22) 01.12.2015<br>(54) VITREOUS SOLID ELECTROLYTE SHEETS OF LI ION CONDUCTING SULFUR-BASED GLASS AND ASSOCIATED STRUCTURES, CELLS AND METHODS                                                                                                                                                                                                                                                                                                                                                                            | (51) H01M 4/24<br>H01M 4/38<br>H01M 6/22<br>H01M 6/40<br>H01M 10/04<br>H01M 10/054<br>H01M 10/0565<br>(11) EP3226339<br>(21) EP17164163.2<br>(47) 14.07.2021<br>(22) 31.03.2017<br>(54) IONIC LIQUID GEL FOR ELECTROLYTE, METHOD OF AND INK FOR MAKING THE SAME, AND PRINTED BATTERIES INCLUDING SUCH IONIC LIQUID GELS AND/OR ELECTROLYTES |
| (51) H01M 4/02<br>H01M 4/36<br>H01M 4/62<br>H01M 4/131<br>H01M 4/136<br>H01M 4/1391<br>H01M 4/1397<br>H01M 4/48<br>H01M 4/58<br>H01M 4/583<br>H01M 10/0525                                                                                                                                                                              | (73) Polyplus Battery Company<br>(72) VISCO, Steven J.<br>NIMON, Yevgeniy S.<br>DE JONGHE, Lutgard C.<br>KATZ, Bruce D.<br>NIMON, Vitaliy<br>(31) 201462086641 P<br>201562111048 P<br>201562126319 P<br>201562146809 P<br>201562149250 P<br>201562165791 P<br>201562171561 P<br>201562196247 P<br>201562222408 P<br>201514954812<br>(32) 02.12.2014<br>02.02.2015<br>27.02.2015<br>13.04.2015<br>17.04.2015<br>22.05.2015<br>05.06.2015<br>23.07.2015<br>23.09.2015<br>30.11.2015<br>(33) United States of America<br>United States of America<br>United States of America<br>United States of America<br>United States of America<br>United States of America<br>United States of America<br>United States of America | (73) Imprint Energy, Inc.<br>(72) SHI, Chaojun<br>HO, Christine Chihfan<br>MACKENZIE, J. Devin<br>(31) 201662316115 P<br>(32) 31.03.2016<br>(33) United States of America                                                                                                                                                                   |
| (11) EP3611784<br>(21) EP18795093.6<br>(47) 07.07.2021<br>(87) KR2018005228<br>08.11.2018<br>(22) 04.05.2018<br>(54) NEGATIVE ELECTRODE ACTIVE MATERIAL, NEGATIVE ELECTRODE COMPRISING NEGATIVE ELECTRODE ACTIVE MATERIAL, SECONDARY BATTERY COMPRISING NEGATIVE ELECTRODE, AND METHOD FOR PREPARING NEGATIVE ELECTRODE ACTIVE MATERIAL |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (51) H01M 4/36<br>H01M 4/62<br>H01M 4/66<br>H01M 4/58<br>(11) EP3147975<br>(21) EP15795693.9<br>(47) 07.07.2021<br>(87) JP2015064730<br>26.11.2015<br>(22) 22.05.2015<br>(54) POSITIVE ELECTRODE MATERIAL, SECONDARY BATTERY, METHOD FOR MANUFACTURING POSITIVE ELECTRODE MATERIAL, AND METHOD FOR MANUFACTURING SECONDARY BATTERY          |
| (73) LG Chem, Ltd.<br>(72) KIM, Dong Hyuk<br>KIM, Eun Kyung<br>LEE, Yong Ju<br>JO, Rae Hwan<br>CHOI, Jung Hyun<br>(31) 20170057050<br>(32) 04.05.2017<br>(33) Korea (Republic)                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (73) Nippon Chemi-Con Corporation<br>(72) NAOI Katsuhiko<br>(31) 2014107342<br>(32) 23.05.2014<br>(33) Japan                                                                                                                                                                                                                                |
| (51) H01M 4/02<br>H01M 4/36<br>H01M 4/62<br>H01M 4/1391<br>H01M 4/58<br>H01M 4/583<br>H01M 10/052                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (51) H01M 4/38<br>H01M 4/46<br>H01M 8/18<br>H01M 12/08<br>H01M 10/054<br>H01M 10/0567<br>H01M 10/0568<br>H01M 10/0569                                                                                                                                                                                                                       |

|                                        |                                         |                                           |
|----------------------------------------|-----------------------------------------|-------------------------------------------|
| H01G 11/30                             | RÖSER, Stephan                          | (11) EP3624241                            |
| H01G 11/60                             | WAGNER, Ralf                            | (21) EP19195407.2                         |
| H01G 11/62                             | WIEMHÖFER, Hans-Dieter                  | (47) 14.07.2021                           |
| H01G 11/64                             | WINTER, Martin                          | (22) 04.09.2019                           |
| (11) EP3477759                         | (31) 102016125323                       | (54) METHOD OF MANUFACTURING AN           |
| (21) EP17833822.4                      | 102017107253                            | ELECTROCHEMICAL REACTOR FLOW              |
| (47) 07.07.2021                        | (32) 22.12.2016                         | GUIDE                                     |
| (87) JP2017019535                      | 04.04.2017                              | (73) Commissariat à l'Énergie Atomique et |
| 01.02.2018                             | (33) Germany                            | aux Énergies Alternatives                 |
| (22) 25.05.2017                        | Germany                                 | (72) SALOMON, Jérémie                     |
| (54) ELECTROLYTE SOLUTION AND          | (51) H01M 4/86                          | AMESTOY, Benjamin                         |
| ELECTROCHEMICAL DEVICE                 | H01M 4/88                               | BLACHOT, Jean-François                    |
| COMPRISING THE SAME                    | H01M 4/90                               | TREMBLAY, Denis                           |
| (73) Murata Manufacturing Co., Ltd.    | H01M 4/92                               | (31) 1871024                              |
| (72) MATSUMOTO Ryuhei                  | H01M 8/10                               | (32) 12.09.2018                           |
| NAKAYAMA Yuri                          | H01M 8/1018                             | (33) France                               |
| KUBOTA Tadahiko                        | (11) EP3525271                          | (51) H01M 8/0221                          |
| (31) 2016146302                        | (21) EP17858323.3                       | H01M 8/0226                               |
| (32) 26.07.2016                        | (47) 07.07.2021                         | H01M 8/0254                               |
| (33) Japan                             | (87) JP2017035712                       | H01M 8/1018                               |
| (51) H01M 4/505                        | 12.04.2018                              | (11) EP3560020                            |
| H01M 4/525                             | (22) 29.09.2017                         | (21) EP17836042.6                         |
| H01M 10/052                            | (54) METHOD FOR PRODUCING               | (47) 14.07.2021                           |
| H01M 10/0525                           | ELECTRODE CATALYST, AND                 | (87) IB2017001586                         |
| H01M 10/0567                           | ELECTRODE CATALYST                      | 28.06.2018                                |
| (11) EP3648231                         | (73) Mitsui Mining & Smelting Co., Ltd. | (22) 19.12.2017                           |
| (21) EP18875224.0                      | (72) SENOO, Yuichi                      | (54) METHOD OF MANUFACTURING A            |
| (47) 07.07.2021                        | MIYAKE, Koichi                          | SEPARATOR PLATE FOR A FUEL                |
| (87) KR2018013783                      | TANIGUCHI, Koji                         | CELL, SEPARATOR PLATE AND                 |
| 16.05.2019                             | WATANABE, Hiromu                        | INTERMEDIATE PRODUCT FOR A                |
| (22) 13.11.2018                        | ABE, Naohiko                            | SEPARATOR PLATE                           |
| (54) NON-AQUEOUS ELECTROLYTE FOR       | (31) 2016197622                         | (73) Daimler AG                           |
| LITHIUM SECONDARY BATTERY              | (32) 05.10.2016                         | Karl Wörwag Lack- Und Farbenfabrik        |
| AND LITHIUM SECONDARY BATTERY          | (33) Japan                              | GmbH & Co. KG                             |
| COMPRISING SAME                        | (51) H01M 4/88                          | (72) ULLMANN, Falk                        |
| (73) LG Chem, Ltd.                     | H01M 8/1004                             | WARTA, Helge                              |
| (72) KIM, Ha Eun                       | H01M 8/1018                             | (31) 102016015318                         |
| LIM, Young Min                         | (11) EP3723177                          | (32) 22.12.2016                           |
| KIM, Gwang Yeon                        | (21) EP20163742.8                       | (33) Germany                              |
| LEE, Chul Haeng                        | (47) 07.07.2021                         | (51) H01M 8/04007                         |
| (31) 20170150920                       | (22) 17.03.2020                         | H01M 8/04029                              |
| 20180138408                            | (54) METHOD FOR MANUFACTURING           | H01M 8/04223                              |
| (32) 13.11.2017                        | MEMBRANE ELECTRODE ASSEMBLY             | H01M 8/04225                              |
| 12.11.2018                             | FOR FUEL CELL                           | H01M 8/249                                |
| (33) Korea (Republic)                  | (73) TOYOTA JIDOSHA KABUSHIKI KAISHA    | (11) EP3747074                            |
| Korea (Republic)                       | (72) ENDO, Yoshito                      | (21) EP19783643.0                         |
| (51) H01M 4/66                         | TSUJI, Katsuaki                         | (47) 14.07.2021                           |
| H01M 10/0525                           | KITAJIMA, Noriaki                       | (87) IB2019057252                         |
| H01M 10/0568                           | (31) 2019074010                         | 05.03.2020                                |
| H01M 10/0569                           | (32) 09.04.2019                         | (22) 28.08.2019                           |
| H01G 11/60                             | (33) Japan                              | (54) COOLING SYSTEM FOR FUEL CELL         |
| H01G 11/62                             | (51) H01M 8/02                          | STACKS                                    |
| H01G 11/68                             | H01M 8/10                               | (73) Robert Bosch GmbH                    |
| (11) EP3560023                         | H01M 8/24                               | Nikola Corporation                        |
| (21) EP17823098.3                      | (11) EP3241255                          | (72) LYNK, Kevin                          |
| (47) 14.07.2021                        | (21) EP15876071.0                       | SCHNEIDER, Jesse                          |
| (87) EP2017083610                      | (47) 14.07.2021                         | BELSCHNER, Werner                         |
| 28.06.2018                             | (87) US2015067570                       | HEYSE, Jörg                               |
| (22) 19.12.2017                        | 07.07.2016                              | REMLINGER, Markus                         |
| (54) ELECTROLYTE FOR LITHIUM-ION-      | (22) 28.12.2015                         | (31) 102018214640                         |
| BATTERIES                              | (54) INTERMEDIATE MODULE FOR            | (32) 29.08.2018                           |
| (73) Westfälische Wilhelms-Universität | ELECTROCHEMICAL CELL STACK              | (33) Germany                              |
| Münster                                | (73) Skyre, Inc.                        | (51) H01M 8/04007                         |
| Forschungszentrum Jülich GmbH          | (72) DRISTY, Mark E.                    | H01M 8/043                                |
| (72) BROX, Sebastian                   | (31) 201462097481 P                     | H01M 8/249                                |
| CEKIC-LASKOVIC, Isidora                | (32) 29.12.2014                         | (11) EP3747073                            |
| GRÜNEBAUM, Mariano                     | (33) United States of America           | (21) EP19783642.2                         |
| KRAUSE, Christian Hans                 | (51) H01M 8/0202                        | (47) 14.07.2021                           |

|                                                                                                   |                                                                                                          |                                                                                                                   |
|---------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| (87) IB2019057250<br>05.03.2020                                                                   | (31) 201710764128                                                                                        | SK IE Technology Co., Ltd.                                                                                        |
| (22) 28.08.2019                                                                                   | (32) 30.08.2017                                                                                          | (72) KIM, Yun Bong                                                                                                |
| (54) METHOD FOR OPERATING A FUEL<br>CELL SYSTEM FOR A MOTOR<br>VEHICLE                            | (33) China                                                                                               | KWACK, Won Sub                                                                                                    |
| (73) Robert Bosch GmbH<br>Nikola Corporation                                                      | (51) H01M 10/04                                                                                          | KIM, Hye Jin                                                                                                      |
| (72) LYNK, Kevin                                                                                  | H01M 50/20                                                                                               | LEE, Su Ji                                                                                                        |
| SCHNEIDER, Jesse                                                                                  | H01M 50/209                                                                                              | CHO, Kyu Young                                                                                                    |
| IMRE, Arpad                                                                                       | (11) EP3506389                                                                                           | (31) 20180097252                                                                                                  |
| BELSCHNER, Werner                                                                                 | (21) EP18215084.7                                                                                        | (32) 21.08.2018                                                                                                   |
| ECKERT, Peter                                                                                     | (47) 07.07.2021                                                                                          | (33) Korea (Republic)                                                                                             |
| HEYSE, Jörg                                                                                       | (22) 21.12.2018                                                                                          | (51) H01M 10/12                                                                                                   |
| (31) 102018214643                                                                                 | (54) BATTERY MODULE WITH COMPOSITE<br>END PLATE                                                          | (11) EP3314680                                                                                                    |
| (32) 29.08.2018                                                                                   | (73) Contemporary Amperex Technology Co.,<br>Limited                                                     | (21) EP16815353.4                                                                                                 |
| (33) Germany                                                                                      | (72) CAO, Gen                                                                                            | (47) 14.07.2021                                                                                                   |
| (51) H01M 8/2485                                                                                  | MO, Weihua                                                                                               | (87) US2016039170                                                                                                 |
| (11) EP3782218                                                                                    | YAO, Jihua                                                                                               | 29.12.2016                                                                                                        |
| (21) EP19709431.1                                                                                 | (31) 201711477236                                                                                        | (22) 24.06.2016                                                                                                   |
| (47) 07.07.2021                                                                                   | (32) 29.12.2017                                                                                          | (54) IMPROVED ABSORBENT GLASS MAT<br>SEPARATORS, VRLA BATTERIES,<br>AND RELATED METHODS OF<br>MANUFACTURE AND USE |
| (87) EP2019055296<br>12.12.2019                                                                   | (33) China                                                                                               | (73) Daramic LLC                                                                                                  |
| (22) 04.03.2019                                                                                   | (51) H01M 10/04                                                                                          | (72) KRISHNAMOORTHY, Ahila                                                                                        |
| (54) FUEL CELL DEVICE                                                                             | H01M 50/20                                                                                               | ALEXANDER, Daniel, R.                                                                                             |
| (73) Audi AG                                                                                      | H01M 50/209                                                                                              | (31) 201562185083 P                                                                                               |
| (72) GRETZER, Markus                                                                              | (11) EP3621129                                                                                           | (32) 26.06.2015                                                                                                   |
| KLUY, Norbert                                                                                     | (21) EP18883426.1                                                                                        | (33) United States of America                                                                                     |
| (31) 102018208981                                                                                 | (47) 07.07.2021                                                                                          | (51) H01M 10/42                                                                                                   |
| (32) 07.06.2018                                                                                   | (87) KR2018013132                                                                                        | H01M 10/44                                                                                                        |
| (33) Germany                                                                                      | 06.06.2019                                                                                               | H01M 10/48                                                                                                        |
| (51) H01M 10/04                                                                                   | (22) 31.10.2018                                                                                          | H02H 7/18                                                                                                         |
| H01M 10/0525                                                                                      | (54) BATTERY MODULE PROVIDED WITH<br>END FRAME                                                           | H02J 7/00                                                                                                         |
| H01M 10/0583                                                                                      | (73) LG Chem, Ltd.                                                                                       | H01M 10/0525                                                                                                      |
| H01M 50/538                                                                                       | (72) LEE, Jung-Hoon                                                                                      | G01R 31/392                                                                                                       |
| (11) EP3704750                                                                                    | CHOI, Hang-June                                                                                          | H01M 50/572                                                                                                       |
| (21) EP17805268.4                                                                                 | KANG, Dal-Mo                                                                                             | (11) EP3657591                                                                                                    |
| (47) 14.07.2021                                                                                   | KIM, Kyung-Mo                                                                                            | (21) EP17922507.3                                                                                                 |
| (87) IB2017056866                                                                                 | MUN, Jeong-O                                                                                             | (47) 14.07.2021                                                                                                   |
| 09.05.2019                                                                                        | PARK, Jin-Yong                                                                                           | (87) CN2017099131                                                                                                 |
| (22) 03.11.2017                                                                                   | CHI, Ho-June                                                                                             | 28.02.2019                                                                                                        |
| (54) FOLDABLE FLEXIBLE ASSEMBLING<br>OF CELLS FOR A LITHIUM-ION<br>BATTERY                        | (31) 20170161954                                                                                         | (22) 25.08.2017                                                                                                   |
| (73) CSEM Centre Suisse d'Electronique et<br>de Microtechnique SA - Recherche et<br>Développement | (32) 29.11.2017                                                                                          | (54) TERMINAL DEVICE AND BATTERY<br>SAFETY MONITORING METHOD AND<br>MONITORING SYSTEM THEREFOR                    |
| (72) EL BARADAI, Oussama                                                                          | (33) Korea (Republic)                                                                                    | (73) GUANGDONG OPPO MOBILE<br>TELECOMMUNICATIONS CORP., LTD.                                                      |
| MUSTACCIO, Alessandro                                                                             | (51) H01M 10/04                                                                                          | (72) CHEN, Wei                                                                                                    |
| FRICKE, Sören                                                                                     | H01M 50/531                                                                                              | HU, Zhihua                                                                                                        |
| BOSSHARD, Christian                                                                               | H01M 50/543                                                                                              | ZHANG, Hui                                                                                                        |
| (51) H01M 10/04                                                                                   | (11) EP3758102                                                                                           | ZHANG, Jialiang                                                                                                   |
| H01M 50/15                                                                                        | (21) EP19194487.5                                                                                        | CHEN, Shebiao                                                                                                     |
| H01M 50/172                                                                                       | (47) 07.07.2021                                                                                          | (51) H01M 10/42                                                                                                   |
| H01M 50/543                                                                                       | (22) 29.08.2019                                                                                          | H01M 10/44                                                                                                        |
| H01M 50/578                                                                                       | (54) SECONDARY BATTERY                                                                                   | H01M 10/48                                                                                                        |
| (11) EP3664182                                                                                    | (73) Jiangsu Contemporary Amperex<br>Technology Limited                                                  | H02J 7/00                                                                                                         |
| (21) EP20152625.8                                                                                 | (72) YANG, Jianxiong                                                                                     | (11) EP3096432                                                                                                    |
| (47) 14.07.2021                                                                                   | (31) 201921000978 U                                                                                      | (21) EP15870148.2                                                                                                 |
| (22) 07.02.2018                                                                                   | (32) 28.06.2019                                                                                          | (47) 07.07.2021                                                                                                   |
| (54) CAP ASSEMBLY FOR SECONDARY<br>BATTERY, SECONDARY BATTERY<br>AND BATTERY MODULE               | (33) China                                                                                               | (87) KR2015007639                                                                                                 |
| (73) Contemporary Amperex Technology Co.,<br>Limited                                              | (51) H01M 10/0525                                                                                        | 23.06.2016                                                                                                        |
| (72) LI, Quankun                                                                                  | H01M 50/40                                                                                               | (22) 22.07.2015                                                                                                   |
| WANG, Peng                                                                                        | H01M 50/409                                                                                              | (54) APPARATUS AND METHOD FOR<br>CONTROLLING POWER FOR A<br>SECONDARY BATTERY                                     |
| ZHU, Taosheng                                                                                     | (11) EP3614456                                                                                           | (73) LG Chem, Ltd.                                                                                                |
|                                                                                                   | (21) EP19192620.3                                                                                        | (72) JUNG, Seung-Hun                                                                                              |
|                                                                                                   | (47) 07.07.2021                                                                                          | (31) 20140184813                                                                                                  |
|                                                                                                   | (22) 20.08.2019                                                                                          | (32) 19.12.2014                                                                                                   |
|                                                                                                   | (54) SEPARATOR FOR LITHIUM<br>SECONDARY BATTERY, AND LITHIUM<br>SECONDARY BATTERY COMPRISING<br>THE SAME | (33) Korea (Republic)                                                                                             |
|                                                                                                   | (73) SK Innovation Co., Ltd.                                                                             |                                                                                                                   |

|                                                                                                                                                                                                                                 |                                                                                                                             |                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) H01M 10/42<br>H01M 10/44<br>H02J 7/00<br>B60L 58/22                                                                                                                                                                        | (72) STEFANOPOULOU, Anna G.<br>MOHAN, Shankar Narayan<br>KIM, Youngki<br>SIEGEL, Jason B.                                   | ZHANG, Wei<br>ZOU, Xiyang<br>WU, Xingyuan<br>ZHU, Taosheng                                                                                                       |
| (11) EP3203600                                                                                                                                                                                                                  | (31) 201462043519 P                                                                                                         | (31) 201810496455                                                                                                                                                |
| (21) EP15846025.3                                                                                                                                                                                                               | (32) 29.08.2014                                                                                                             | (32) 22.05.2018                                                                                                                                                  |
| (47) 07.07.2021                                                                                                                                                                                                                 | (33) United States of America                                                                                               | (33) China                                                                                                                                                       |
| (87) JP2015003719<br>07.04.2016                                                                                                                                                                                                 | (51) H01M 10/48<br>H02J 7/00<br>G01R 31/389<br>G01R 31/36                                                                   | (51) H01M 50/103<br>H01M 50/169<br>H01M 50/30                                                                                                                    |
| (22) 24.07.2015                                                                                                                                                                                                                 | (11) EP3214456                                                                                                              | (11) EP3276702                                                                                                                                                   |
| (54) ELECTRIC POWER STORAGE DEVICE,<br>ELECTRONIC DEVICE, ELECTRIC<br>VEHICLE, AND ELECTRIC POWER<br>SYSTEM                                                                                                                     | (21) EP15864877.4                                                                                                           | (21) EP17188754.0                                                                                                                                                |
| (73) Murata Manufacturing Co., Ltd.                                                                                                                                                                                             | (47) 07.07.2021                                                                                                             | (47) 14.07.2021                                                                                                                                                  |
| (72) SUGENO, Naoyuki<br>WATANABE, Kohki<br>IMAMURA, Noritoshi<br>SUZUKI, Yusuke<br>HASHIMOTO, Takuma                                                                                                                            | (87) JP2015084205<br>09.06.2016                                                                                             | (22) 16.02.2011                                                                                                                                                  |
| (31) 2014199044                                                                                                                                                                                                                 | (22) 04.12.2015                                                                                                             | (54) BATTERY AND PRODUCTION<br>METHOD THEREOF                                                                                                                    |
| (32) 29.09.2014                                                                                                                                                                                                                 | (54) SECONDARY BATTERY STATE<br>DETECTION DEVICE AND<br>SECONDARY BATTERY STATE<br>DETECTION METHOD                         | (73) KABUSHIKI KAISHA TOSHIBA                                                                                                                                    |
| (33) Japan                                                                                                                                                                                                                      | (73) Furukawa Electric Co. Ltd.<br>Furukawa Automotive Systems Inc.                                                         | (72) Shimizu, Toshifumi<br>Kurata, Kengo<br>Toyota, Natsuki<br>Kashiwazaki, Eiki                                                                                 |
| (51) H01M 10/46<br>H02J 7/00<br>H02J 7/35<br>H02S 40/34<br>H02S 40/38<br>B60L 50/64<br>B60L 53/30<br>B60L 53/51<br>B60L 53/63<br>B60L 53/64<br>B60L 53/65<br>B60L 53/66<br>B60L 53/80<br>B60L 55/00<br>B60L 58/21<br>B60L 58/26 | (72) TAKASHIMA, Naoya<br>IWANE, Noriyasu                                                                                    | (31) 2010032952<br>2010058181                                                                                                                                    |
| (11) EP3041706                                                                                                                                                                                                                  | (31) 2014247479                                                                                                             | (32) 17.02.2010<br>15.03.2010                                                                                                                                    |
| (21) EP14851068.8                                                                                                                                                                                                               | (32) 05.12.2014                                                                                                             | (33) Japan<br>Japan                                                                                                                                              |
| (47) 07.07.2021                                                                                                                                                                                                                 | (33) Japan                                                                                                                  | (51) H01M 50/116<br>H01M 50/148<br>H01M 50/538                                                                                                                   |
| (87) US2014058671<br>09.04.2015                                                                                                                                                                                                 | (51) H01M 10/613<br>H01M 10/625<br>H01M 10/647<br>H01M 10/655<br>H01M 10/6551<br>H01M 10/6554<br>H01M 10/6556<br>H01M 50/20 | (11) EP3618159<br>(21) EP18791914.7<br>(47) 14.07.2021<br>(87) KR2018004761<br>01.11.2018                                                                        |
| (22) 01.10.2014                                                                                                                                                                                                                 | (11) EP3340367                                                                                                              | (22) 24.04.2018                                                                                                                                                  |
| (54) SOLAR CANOPY WITH INTEGRAL<br>STORAGE COMPARTMENT TO<br>RECEIVE HIGH CAPACITY BATTERIES                                                                                                                                    | (21) EP17810467.5                                                                                                           | (54) INSULATING MEMBER, METHOD<br>FOR MANUFACTURING INSULATING<br>MEMBER, AND METHOD FOR<br>MANUFACTURING CYLINDRICAL<br>BATTERY COMPRISING INSULATING<br>MEMBER |
| (73) LT350, LLC                                                                                                                                                                                                                 | (47) 14.07.2021                                                                                                             | (73) LG Chem, Ltd.                                                                                                                                               |
| (72) THRAMANN, Jeff<br>DAVIDOVITS, Terence<br>GREEN, Erik                                                                                                                                                                       | (87) KR2017003848<br>14.12.2017                                                                                             | (72) SHIN, Hang Soo<br>KIM, Do Gyun<br>JUNG, Sang Sok<br>LEE, Byoung Kook<br>LEE, Byoung Gu<br>KIM, Chan Bae                                                     |
| (31) 201361885897 P                                                                                                                                                                                                             | (22) 10.04.2017                                                                                                             | (31) 20170054247                                                                                                                                                 |
| (32) 02.10.2013                                                                                                                                                                                                                 | (54) BATTERY MODULE COMPRISING<br>BUFFERING AND COOLING MEMBER<br>HAVING POROUS STRUCTURE                                   | (32) 27.04.2017                                                                                                                                                  |
| (33) United States of America                                                                                                                                                                                                   | (73) LG Chem, Ltd.<br>(72) OH, Sei Woon<br>KIM, Soo Youl<br>KIM, Hyun Min<br>SHIM, Jung Ah                                  | (33) Korea (Republic)                                                                                                                                            |
| (51) H01M 10/48<br>G01R 31/36                                                                                                                                                                                                   | (31) 20160071475                                                                                                            | (51) H01M 50/15<br>H01M 50/172<br>H01M 50/528<br>H01M 50/543                                                                                                     |
| (11) EP3186652                                                                                                                                                                                                                  | (32) 09.06.2016                                                                                                             | (11) EP3651228                                                                                                                                                   |
| (21) EP15835651.9                                                                                                                                                                                                               | (33) Korea (Republic)                                                                                                       | (21) EP19206262.8                                                                                                                                                |
| (47) 14.07.2021                                                                                                                                                                                                                 | (51) H01M 10/615<br>H01M 10/625<br>H01M 10/6571<br>B60L 58/27                                                               | (47) 14.07.2021                                                                                                                                                  |
| (87) US2015047458<br>03.03.2016                                                                                                                                                                                                 | (11) EP3573176                                                                                                              | (22) 30.10.2019                                                                                                                                                  |
| (22) 28.08.2015                                                                                                                                                                                                                 | (21) EP19153070.8                                                                                                           | (54) SECONDARY BATTERY AND<br>METHOD OF MANUFACTURING THE<br>SECONDARY BATTERY                                                                                   |
| (54) BULK FORCE IN A BATTERY PACK<br>AND ITS APPLICATION TO STATE OF<br>CHARGE ESTIMATION                                                                                                                                       | (47) 07.07.2021                                                                                                             | (73) Contemporary Amperex Technology Co.,<br>Limited                                                                                                             |
| (73) THE REGENTS OF THE UNIVERSITY<br>OF MICHIGAN                                                                                                                                                                               | (22) 22.01.2019                                                                                                             | (72) ZENG, Yuqun<br>ZHAO, Fenggang<br>JIANG, Qingyuan                                                                                                            |
|                                                                                                                                                                                                                                 | (54) BATTERY PACK HEATING APPARATUS<br>AND METHOD OF BATTERY PACK<br>HEATING CONTROL                                        |                                                                                                                                                                  |
|                                                                                                                                                                                                                                 | (73) Contemporary Amperex Technology Co.,<br>Limited                                                                        |                                                                                                                                                                  |
|                                                                                                                                                                                                                                 | (72) HOU, Yizhen<br>DAN, Zhimin                                                                                             |                                                                                                                                                                  |



|                                    |                                             |                                    |
|------------------------------------|---------------------------------------------|------------------------------------|
| HAN, Bo                            | (73) Cellmax Technologies AB                | (51) H01Q 1/12                     |
| CAI, Jiakai                        | (72) YMAN, Niclas                           | H01Q 15/16                         |
| BAI, Qinglin                       | KARLSSON, Dan                               | (11) EP3577714                     |
| WEN, Yuqian                        | JONSSON, Stefan                             | (21) EP18703822.9                  |
| WU, Zhiyang                        | (31) 1551186                                | (47) 14.07.2021                    |
| (31) 201811320340                  | (32) 15.09.2015                             | (87) GB2018050257                  |
| (32) 07.11.2018                    | (33) Sweden                                 | 09.08.2018                         |
| (33) China                         | (51) H01P 5/02                              | (22) 30.01.2018                    |
| (51) H01M 50/20                    | H01Q 1/12                                   | (54) ACTUATING SUPPORT MEMBER      |
| H01M 50/30                         | H01Q 1/24                                   | (73) Oxford Space Systems Limited  |
| (11) EP3772428                     | (11) EP3404765                              | (72) REVELES-WILSON, Juan          |
| (21) EP19190495.2                  | (21) EP18172831.2                           | FRAUX, Vincent                     |
| (47) 07.07.2021                    | (47) 07.07.2021                             | HUMPHRIES, Martin                  |
| (22) 07.08.2019                    | (22) 17.05.2018                             | (31) 201701568                     |
| (54) BATTERY PACK HOUSING          | (54) MODULAR ELECTROMAGNETIC                | (32) 31.01.2017                    |
| PRODUCING AN ACOUSTIC WARNING      | ANTENNA ASSEMBLIES AND                      | (33) United Kingdom                |
| SIGNAL IN CASE OF THERMAL          | METHODS OF ASSEMBLING AND/OR                | (51) H01Q 1/22                     |
| RUNAWAY                            | DISASSEMBLING                               | (11) EP3114729                     |
| (73) Samsung SDI Co., Ltd.         | (73) RF elements s.r.o.                     | (21) EP15759211.4                  |
| (72) Haindl, Michael               | (72) Taptic, Juraj                          | (47) 07.07.2021                    |
| (51) H01P 1/211                    | Marcincák, Martin                           | (87) US2015019542                  |
| H01Q 1/52                          | (31) 201762507657 P                         | 11.09.2015                         |
| H01Q 9/28                          | 201762507663 P                              | (22) 09.03.2015                    |
| H01Q 21/00                         | (32) 17.05.2017                             | (54) UTILITY METER WITH INSULATED  |
| H01Q 21/06                         | 17.05.2017                                  | EXTERNAL ANTENNA                   |
| (11) EP3460908                     | (33) United States of America               | (73) General Electric Company      |
| (21) EP17192899.7                  | United States of America                    | (72) BIETZ, Steven                 |
| (47) 07.07.2021                    | (51) H01P 5/16                              | (31) 201461949943 P                |
| (22) 25.09.2017                    | H04B 1/40                                   | (32) 07.03.2014                    |
| (54) PHASED ARRAY ANTENNA          | H04B 1/525                                  | (33) United States of America      |
| (73) Gapwaves AB                   | (11) EP3685467                              | (51) H01Q 1/22                     |
| (72) Emanuelsson, Thomas           | (21) EP17777845.3                           | H01Q 1/42                          |
| Yang, Jian                         | (47) 07.07.2021                             | H01Q 1/44                          |
| Uz Zaman, Ashraf                   | (87) EP2017074122                           | H02B 1/30                          |
| (51) H01P 3/16                     | 28.03.2019                                  | (11) EP3582321                     |
| (11) EP3453071                     | (22) 22.09.2017                             | (21) EP19179463.5                  |
| (21) EP17725326.7                  | (54) ANTENNA CONNECTION CIRCUITS            | (47) 07.07.2021                    |
| (47) 07.07.2021                    | (73) Telefonaktiebolaget LM Ericsson (PUBL) | (22) 11.06.2019                    |
| (87) FR2017051050                  | (72) SJÖLAND, Henrik                        | (54) ANTENNA ROOF MODULE FOR       |
| 09.11.2017                         | ANDERSSON, Stefan                           | A DISTRIBUTION CABINET,            |
| (22) 02.05.2017                    | (51) H01Q 1/12                              | DISTRIBUTION CABINET WITH          |
| (54) PLASTIC WAVEGUIDE FOR THE     | (11) EP3477766                              | ANTENNA ROOF MODULE AND            |
| PROPAGATION OF WAVES IN THE        | (21) EP18202181.6                           | METHOD FOR THE PRODUCTION          |
| FREQUENCY RANGE COMPRISED          | (47) 07.07.2021                             | THEREOF                            |
| BETWEEN 1 GHZ AND 10 THZ           | (22) 24.10.2018                             | (73) Berthold Sichert GmbH         |
| (73) Université de Bordeaux        | (54) REAR GLASS FOR VEHICLE WITH            | (72) Graf von Hardenberg, Julian   |
| Institut Polytechnique de Bordeaux | ANTENNA                                     | Wegener, Niels                     |
| Centre National de la Recherche    | (73) AGC Inc.                               | (31) 102018114089                  |
| Scientifique                       | (72) HAYASHI, Takuji                        | (32) 13.06.2018                    |
| (72) VOINEAU, Florian              | TOKUNAGA, Satoshi                           | (33) Germany                       |
| GHIOTTO, Anthony                   | (31) 2017207736                             | (51) H01Q 1/24                     |
| KERHERVE, Eric                     | (32) 27.10.2017                             | (11) EP3082191                     |
| (31) 1654003                       | (33) Japan                                  | (21) EP16157846.3                  |
| (32) 03.05.2016                    | (51) H01Q 1/12                              | (47) 07.07.2021                    |
| (33) France                        | H01Q 1/32                                   | (22) 29.02.2016                    |
| (51) H01P 5/02                     | (11) EP3667812                              | (54) ANTENNA DEVICE AND ELECTRONIC |
| H01P 5/103                         | (21) EP18212812.4                           | DEVICE INCLUDING SAME              |
| H01Q 1/24                          | (47) 07.07.2021                             | (73) Samsung Electronics Co., Ltd. |
| H01Q 19/10                         | (22) 14.12.2018                             | (72) Kim, Ji-Won                   |
| H01Q 21/26                         | (54) ANTENNA MODULE AND ROOF                | Kim, Jinu                          |
| (11) EP3350872                     | STRUCTURE FOR A VEHICLE AND                 | Cho, Hui-Won                       |
| (21) EP16846958.3                  | VEHICLE COMPRISING A ROOF                   | (31) 20150028340                   |
| (47) 07.07.2021                    | STRUCTURE                                   | (32) 27.02.2015                    |
| (87) SE2016050863                  | (73) Valeo Comfort and Driving Assistance   | (33) Korea (Republic)              |
| 23.03.2017                         | (72) FUHR, Juergen                          | (51) H01Q 1/24                     |
| (22) 15.09.2016                    | SCHOPRONI, Helmut                           | H01Q 1/27                          |
| (54) ANTENNA ARRANGEMENT USING     | HONG, Ruibin                                | H01Q 1/36                          |
| INDIRECT INTERCONNECTION           |                                             | H01Q 9/42                          |

|                                                                |                                                                                   |                                                                                      |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| H04R 25/00                                                     | H05K 3/00                                                                         | (72) COUPEZ, Jean-Philippe                                                           |
| (11) EP2725655                                                 | H05K 5/00                                                                         | (31) 1355019                                                                         |
| (21) EP14151170.9                                              | H05K 7/00                                                                         | (32) 31.05.2013                                                                      |
| (47) 07.07.2021                                                | (11) EP3503292                                                                    | (33) France                                                                          |
| (22) 10.10.2011                                                | (21) EP18214879.1                                                                 | (51) H01Q 1/38                                                                       |
| (54) A behind-the-ear hearing aid with an improved antenna     | (47) 14.07.2021                                                                   | H01Q 3/02                                                                            |
| (73) GN Hearing A/S                                            | (22) 20.12.2018                                                                   | H01Q 21/06                                                                           |
| (72) Özden, Sinasi                                             | (54) ANTENNA UNIT FOR A MOTOR VEHICLE                                             | H01Q 21/29                                                                           |
| (31) 201000931                                                 | (73) Valeo Comfort and Driving Assistance                                         | (11) EP3621155                                                                       |
| 201100272                                                      | (72) DESCHAMPS, Maxime                                                            | (21) EP19191631.1                                                                    |
| 201170392                                                      | BONIFACE, Sébastien                                                               | (47) 07.07.2021                                                                      |
| (32) 12.10.2010                                                | (31) 1762684                                                                      | (22) 14.08.2019                                                                      |
| 07.04.2011                                                     | (32) 20.12.2017                                                                   | (54) DYNAMICALLY ADJUSTED ANTENNA SYSTEM AND ANTENNA ARRAY INCLUDED THEREIN          |
| 15.07.2011                                                     | (33) France                                                                       | (73) Alpha Networks Inc.                                                             |
| (33) Denmark                                                   | (51) H01Q 1/32                                                                    | (72) YEN, ANYU                                                                       |
| Denmark                                                        | H04B 7/185                                                                        | KUO, Rong-Fa                                                                         |
| Denmark                                                        | (11) EP3654549                                                                    | (31) 107130906                                                                       |
| (51) H01Q 1/24                                                 | (21) EP19209213.8                                                                 | (32) 04.09.2018                                                                      |
| H01Q 9/42                                                      | (47) 14.07.2021                                                                   | (33) Taiwan, Province of China                                                       |
| H01Q 5/328                                                     | (22) 14.11.2019                                                                   | (51) H01Q 1/52                                                                       |
| H01Q 5/371                                                     | (54) METHOD AND DEVICE FOR CONSERVING THE POINTING OF AN ANTENNA WITH A SATELLITE | H01Q 3/26                                                                            |
| (11) EP3246989                                                 | (73) Thales                                                                       | H01Q 3/32                                                                            |
| (21) EP15881506.8                                              | Institut National des Sciences Appliquees de Lyon (Insa Lyon)                     | H01Q 11/08                                                                           |
| (47) 14.07.2021                                                | Ecole Centrale de Lyon                                                            | H01Q 21/00                                                                           |
| (87) CN2015072782                                              | Centre National de la Recherche Scientifique                                      | H01Q 21/08                                                                           |
| 18.08.2016                                                     | UNIVERSITE CLAUDE BERNARD - LYON 1                                                | (11) EP3742554                                                                       |
| (22) 11.02.2015                                                | (72) BROUSSARD, Elliot                                                            | (21) EP18906900.8                                                                    |
| (54) MULTI-FREQUENCY ANTENNA AND TERMINAL DEVICE               | LADEVEZ, Maxime                                                                   | (47) 14.07.2021                                                                      |
| (73) Huawei Technologies Co. Ltd.                              | BRUN, Xavier                                                                      | (87) JP2018006614                                                                    |
| (72) CHANG, Chih-Hua                                           | PHAM, Minh Tu                                                                     | 29.08.2019                                                                           |
| LEE, Chien-Ming                                                | (31) 1871833                                                                      | (22) 23.02.2018                                                                      |
| YANG, Yu Chan                                                  | (32) 15.11.2018                                                                   | (54) ANTENNA DEVICE AND ARRAY ANTENNA DEVICE                                         |
| WANG, Hanyang                                                  | (33) France                                                                       | (73) Mitsubishi Electric Corporation                                                 |
| (51) H01Q 1/24                                                 | (51) H01Q 1/32                                                                    | (72) YANAGI, Takashi                                                                 |
| H04B 1/3827                                                    | H05K 7/20                                                                         | SUZUKI, Kiyotaka                                                                     |
| (11) EP3624351                                                 | H05K 9/00                                                                         | MAKIMURA, Hidetoshi                                                                  |
| (21) EP19188358.6                                              | (11) EP3656193                                                                    | NISHIOKA, Yasuhiro                                                                   |
| (47) 07.07.2021                                                | (21) EP18738367.4                                                                 | (51) H01Q 3/24                                                                       |
| (22) 25.07.2019                                                | (47) 07.07.2021                                                                   | H01Q 9/04                                                                            |
| (54) MILLIMETER WAVE ANTENNA MANAGEMENT                        | (87) EP2018069445                                                                 | H01Q 15/00                                                                           |
| (73) Motorola Mobility LLC                                     | 24.01.2019                                                                        | H01Q 21/00                                                                           |
| (72) ALAMEH, Rachid                                            | (22) 17.07.2018                                                                   | H01Q 21/06                                                                           |
| KRENZ, Eric                                                    | (54) ON-BOARD TELEMATIC DEVICE WITH INTEGRATED COOLING FOR A MOTOR VEHICLE        | H01Q 21/22                                                                           |
| (31) 201816112311                                              | (73) Valeo Comfort and Driving Assistance                                         | H01Q 21/28                                                                           |
| (32) 24.08.2018                                                | (72) KLEIN, Patrick                                                               | H01Q 25/00                                                                           |
| (33) United States of America                                  | CURCIO, Renato                                                                    | H01Q 5/42                                                                            |
| (51) H01Q 1/27                                                 | (31) 1756748                                                                      | (11) EP3257107                                                                       |
| H01Q 1/38                                                      | (32) 17.07.2017                                                                   | (21) EP16749609.0                                                                    |
| H01Q 7/00                                                      | (33) France                                                                       | (47) 14.07.2021                                                                      |
| (11) EP3567672                                                 | (51) H01Q 1/36                                                                    | (87) US2016016390                                                                    |
| (21) EP19167645.1                                              | H01Q 9/04                                                                         | 18.08.2016                                                                           |
| (47) 07.07.2021                                                | (11) EP3005476                                                                    | (22) 03.02.2016                                                                      |
| (22) 05.04.2019                                                | (21) EP14727501.0                                                                 | (54) COMBINED ANTENNA APERTURES ALLOWING SIMULTANEOUS MULTIPLE ANTENNA FUNCTIONALITY |
| (54) HEARING AID WITH INTEGRATED ANTENNA AND ELECTRONICS FRAME | (47) 14.07.2021                                                                   | (73) Kymeta Corporation                                                              |
| (73) Sivantos Pte. Ltd.                                        | (87) EP2014061266                                                                 | (72) BILY, Adam                                                                      |
| (72) FARMAKIDIS, Constantine                                   | 04.12.2014                                                                        | SAZEGAR, Mohsen                                                                      |
| NIPP, Oliver                                                   | (22) 30.05.2014                                                                   | KUNDTZ, Nathan                                                                       |
| (31) 102018207179                                              | (54) MULTILAYER COMPACT ANTENNA                                                   | STEVENSON, Ryan                                                                      |
| (32) 08.05.2018                                                | (73) INSTITUT MINES TELECOM / TELECOM BRETAGNE                                    | (31) 201562115070 P                                                                  |
| (33) Germany                                                   |                                                                                   | 201514954415                                                                         |
| (51) H01Q 1/32                                                 |                                                                                   | (32) 11.02.2015                                                                      |
| H01Q 1/38                                                      |                                                                                   | 30.11.2015                                                                           |
| H01Q 7/00                                                      |                                                                                   | (33) United States of America                                                        |
| H01Q 7/08                                                      |                                                                                   |                                                                                      |

|                                                                           |                                                               |                                                                                                                  |
|---------------------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| United States of America                                                  | (32) 17.12.2015                                               | TÜRKEKÖLE, Muhammet, Ali                                                                                         |
| (51) H01Q 3/26                                                            | (33) France                                                   | (31) 102016115601                                                                                                |
| (11) EP2797167                                                            | (51) H01R 4/10                                                | (32) 23.08.2016                                                                                                  |
| (21) EP14165478.0                                                         | H01R 4/24                                                     | (33) Germany                                                                                                     |
| (47) 14.07.2021                                                           | (11) EP2837061                                                | (51) H01R 4/48                                                                                                   |
| (22) 22.04.2014                                                           | (21) EP13717483.5                                             | H01R 4/64                                                                                                        |
| (54) Distributed supply circuit for a network for forming an antenna beam | (47) 07.07.2021                                               | H01R 11/03                                                                                                       |
| (73) Thales                                                               | (87) EP2013057703                                             | H02G 3/32                                                                                                        |
| Das Photonics, S.L.                                                       | 17.10.2013                                                    | (11) EP3082195                                                                                                   |
| (72) Caille, Gérard                                                       | (22) 12.04.2013                                               | (21) EP16161803.8                                                                                                |
| Sotom, Michel                                                             | (54) CONTACTING DEVICE FOR CONNECTING AN ELECTRICAL CONDUCTOR | (47) 14.07.2021                                                                                                  |
| Piqueras Ruiperez, Miguel Angel                                           | (73) TDK Electronics AG                                       | (22) 23.03.2016                                                                                                  |
| Mengual Chulia, Teresa                                                    | (72) SOM, Cem                                                 | (54) SCREWLESS CLAMPING DEVICE FOR ELECTRIC CONDUCTORS                                                           |
| (31) 1300972                                                              | YANG, Gino                                                    | (73) DEHN SE + Co KG                                                                                             |
| (32) 26.04.2013                                                           | CAI, Park                                                     | (72) Schrollinger, Andreas                                                                                       |
| (33) France                                                               | (31) 102012103162                                             | Braun, Christian                                                                                                 |
| (51) H01Q 3/26                                                            | (32) 12.04.2012                                               | Seeger, Siegfried                                                                                                |
| H04B 7/06                                                                 | (33) Germany                                                  | (31) 102015004660                                                                                                |
| H04B 17/12                                                                | (51) H01R 4/18                                                | 102015010312                                                                                                     |
| H04B 7/0456                                                               | H01R 9/05                                                     | (32) 13.04.2015                                                                                                  |
| (11) EP3577783                                                            | H01R 13/11                                                    | 06.08.2015                                                                                                       |
| (21) EP18703955.7                                                         | H01R 13/502                                                   | (33) Germany                                                                                                     |
| (47) 07.07.2021                                                           | H01R 13/53                                                    | Germany                                                                                                          |
| (87) EP2018052561                                                         | H01R 13/58                                                    | (51) H01R 4/48                                                                                                   |
| 09.08.2018                                                                | (11) EP3685471                                                | H01R 13/703                                                                                                      |
| (22) 01.02.2018                                                           | (21) EP18773929.7                                             | (11) EP3476010                                                                                                   |
| (54) BEAMFORMING CODEBOOK ADAPTION TO ANTENNA ARRAY IMPERFECTIONS         | (47) 07.07.2021                                               | (21) EP17728047.6                                                                                                |
| (73) Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V. | (87) DE2018100761                                             | (47) 14.07.2021                                                                                                  |
| (72) VARATHARAJAN, Sutharshun                                             | 28.03.2019                                                    | (87) DE2017100419                                                                                                |
| LANDMANN, Markus                                                          | (22) 06.09.2018                                               | 28.12.2017                                                                                                       |
| GROSSMANN, Marcus                                                         | (54) HIGH-CURRENT CONNECTOR COMPRISING AN INSULATING BUSH     | (22) 17.05.2017                                                                                                  |
| (31) 17154486                                                             | (73) Harting Electric GmbH & Co. KG                           | (54) ELECTRICAL CONDUCTOR CONNECTION                                                                             |
| (32) 02.02.2017                                                           | (72) SCHNIEDER, Stefan                                        | (73) HARTING Electronics GmbH                                                                                    |
| (33) European Patent Office (EPO)                                         | (31) 102017121976                                             | (72) LÜCKEMEIER, Martin                                                                                          |
| (51) H01Q 3/40                                                            | (32) 22.09.2017                                               | HUHMANN, Andreas                                                                                                 |
| H01Q 21/00                                                                | (33) Germany                                                  | (31) 102016111565                                                                                                |
| H01Q 23/00                                                                | (51) H01R 4/20                                                | (32) 23.06.2016                                                                                                  |
| (11) EP3467940                                                            | H01R 13/523                                                   | (33) Germany                                                                                                     |
| (21) EP17195389.6                                                         | H01R 13/53                                                    | (51) H01R 4/66                                                                                                   |
| (47) 14.07.2021                                                           | H02G 1/10                                                     | (11) EP3382808                                                                                                   |
| (22) 09.10.2017                                                           | H02G 15/14                                                    | (21) EP18163442.9                                                                                                |
| (54) RADAR MODULE                                                         | (11) EP2979331                                                | (47) 07.07.2021                                                                                                  |
| (73) NXP USA, Inc.                                                        | (21) EP14728904.5                                             | (22) 22.03.2018                                                                                                  |
| (72) SION, Arnaud                                                         | (47) 07.07.2021                                               | (54) VERTICAL EARTH UNIT                                                                                         |
| REUTER, Ralf                                                              | (87) EP2014061263                                             | (73) DOMINIĄK, Andrzej                                                                                           |
| AHMED, Shamsuddin                                                         | 11.12.2014                                                    | DOMINIĄK, Tymoteusz                                                                                              |
| SELER, Ernst                                                              | (22) 30.05.2014                                               | TAURON Dystrybucja Spółka Akcyjna                                                                                |
| (51) H01Q 21/06                                                           | (54) UNDERWATER CONNECTING APPARATUS AND ASSEMBLY             | (72) Dominiak, Andrzej                                                                                           |
| H01Q 21/29                                                                | (73) Siemens Energy Global GmbH & Co. KG                      | Dominiak, Tymoteusz                                                                                              |
| H01Q 25/04                                                                | (72) LEWIN, Richard                                           | (31) 42101217                                                                                                    |
| H01Q 5/328                                                                | PLANT, Christopher                                            | (32) 28.03.2017                                                                                                  |
| H01Q 5/385                                                                | (31) 13170455                                                 | (33) Poland                                                                                                      |
| (11) EP3182511                                                            | (32) 04.06.2013                                               | (51) H01R 9/05                                                                                                   |
| (21) EP16204890.4                                                         | (33) European Patent Office (EPO)                             | H01R 43/20                                                                                                       |
| (47) 07.07.2021                                                           | (51) H01R 4/48                                                | (11) EP3266076                                                                                                   |
| (22) 16.12.2016                                                           | (11) EP3504755                                                | (21) EP16705039.2                                                                                                |
| (54) ARRAY-TYPE ANTENNA SYSTEM                                            | (21) EP17752398.2                                             | (47) 14.07.2021                                                                                                  |
| (73) Centre National d'Etudes Spatiales                                   | (47) 07.07.2021                                               | (87) EP2016000282                                                                                                |
| Centre National de la Recherche Scientifique (CNRS)                       | (87) EP2017070839                                             | 09.09.2016                                                                                                       |
| (72) MENUDIER, Cyrille                                                    | 01.03.2018                                                    | (22) 18.02.2016                                                                                                  |
| THEVENOT, Marc                                                            | (22) 17.08.2017                                               | (54) METHOD FOR ASSEMBLING AN ANGLED PLUG CONNECTOR AND MOUNTING UNIT FOR MANUFACTURING AN ANGLED PLUG CONNECTOR |
| ROMIER, Maxime                                                            | (54) SPRING CLAMP TERMINAL                                    |                                                                                                                  |
| (31) 1562606                                                              | (73) Wago Verwaltungsgesellschaft mbH                         |                                                                                                                  |
|                                                                           | (72) WITTE, Thomas                                            |                                                                                                                  |

|                                                                                        |                                                                                                                          |                                                                                       |
|----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| (73) Rosenberger Hochfrequenztechnik GmbH & Co. KG                                     | E04F 13/08                                                                                                               | 106139077                                                                             |
| (72) SINGHAMMER, Martin                                                                | G06F 3/14                                                                                                                | (32) 10.11.2016                                                                       |
| HOHENADL, Florian                                                                      | G09G 5/00                                                                                                                | 09.11.2017                                                                            |
| (31) 102015002832                                                                      | G09G 5/02                                                                                                                | (33) France                                                                           |
| (32) 05.03.2015                                                                        | H01R 11/30                                                                                                               | Taiwan, Province of China                                                             |
| (33) Germany                                                                           | H01R 13/62                                                                                                               | (51) H01R 13/41                                                                       |
| (51) H01R 9/24                                                                         | (11) EP3148006                                                                                                           | H01R 13/52                                                                            |
| H01R 11/26                                                                             | (21) EP16168934.4                                                                                                        | H01R 13/74                                                                            |
| H01R 13/52                                                                             | (47) 07.07.2021                                                                                                          | (11) EP3547461                                                                        |
| H01R 13/533                                                                            | (22) 10.05.2016                                                                                                          | (21) EP19165670.1                                                                     |
| H02G 3/04                                                                              | (54) SYSTEM FOR CREATING MOSAICKED DISPLAY DEVICES                                                                       | (47) 14.07.2021                                                                       |
| (11) EP3201993                                                                         | (73) Production Resource Group, L.L.C.                                                                                   | (22) 28.03.2019                                                                       |
| (21) EP15846351.3                                                                      | (72) HOCHMAN, Jeremy                                                                                                     | (54) TERMINAL BLOCK AND VEHICULAR DEVICE                                              |
| (47) 07.07.2021                                                                        | THIELEMANS, Robbie                                                                                                       | (73) Yazaki Corporation                                                               |
| (87) US2015051740                                                                      | DANKO, Steve                                                                                                             | (72) KAWAMURA, Yukihiro                                                               |
| 07.04.2016                                                                             | (31) 201562232839 P                                                                                                      | ISAKA, Naoki                                                                          |
| (22) 23.09.2015                                                                        | (32) 25.09.2015                                                                                                          | (31) 2018066896                                                                       |
| (54) TERMINAL FEEDTHROUGH                                                              | (33) United States of America                                                                                            | (32) 30.03.2018                                                                       |
| (73) Micro Motion, Inc.                                                                | (51) H01R 12/57                                                                                                          | (33) Japan                                                                            |
| (72) ANDERSON, Erik, D.                                                                | H01R 12/58                                                                                                               | (51) H01R 13/42                                                                       |
| COTA, Jeffery, A.                                                                      | B62D 5/04                                                                                                                | H01R 13/436                                                                           |
| MESSENGER, Samuel, E.                                                                  | H01R 4/58                                                                                                                | H01R 13/506                                                                           |
| MAYER, Michael, J.                                                                     | H01R 13/04                                                                                                               | (11) EP3465838                                                                        |
| MIKOLICHEK, Michael, J.                                                                | H01R 13/11                                                                                                               | (21) EP17725630.2                                                                     |
| BARTO, Michael, W.                                                                     | H01R 105/00                                                                                                              | (47) 07.07.2021                                                                       |
| (31) 201462057695 P                                                                    | H02K 5/22                                                                                                                | (87) EP2017062929                                                                     |
| 201514718681                                                                           | H02K 11/33                                                                                                               | 07.12.2017                                                                            |
| (32) 30.09.2014                                                                        | (11) EP3477776                                                                                                           | (22) 29.05.2017                                                                       |
| 21.05.2015                                                                             | (21) EP17843639.0                                                                                                        | (54) ELECTRICAL CONNECTOR WITH GUIDING FEATURE COMPRISING TWO RAMPS                   |
| (33) United States of America                                                          | (47) 14.07.2021                                                                                                          | (73) Aptiv Technologies Limited                                                       |
| United States of America                                                               | (87) JP2017030135                                                                                                        | (72) KOT, Lukasz                                                                      |
| (51) H01R 9/26                                                                         | 01.03.2018                                                                                                               | (31) 16172634                                                                         |
| (11) EP2503645                                                                         | (22) 23.08.2017                                                                                                          | (32) 02.06.2016                                                                       |
| (21) EP12002035.9                                                                      | (54) TERMINAL CONNECTION COMPONENT, AND TERMINAL CONNECTION STRUCTURE USING SAME FOR CONNECTING CONTROL DEVICE AND MOTOR | (33) European Patent Office (EPO)                                                     |
| (47) 14.07.2021                                                                        | (73) NSK Ltd.                                                                                                            | (51) H01R 13/627                                                                      |
| (22) 22.03.2012                                                                        | (72) SUNAGA Takashi                                                                                                      | H01R 13/639                                                                           |
| (54) Latch assembly for mounting power supply base for a process fieldbus on a support | OSAKABE Tadayoshi                                                                                                        | H01R 13/641                                                                           |
| (73) Phoenix Contact GmbH & Co. KG                                                     | (31) 2016162749                                                                                                          | (11) EP2863492                                                                        |
| (72) Correll, Michael Anthony                                                          | 2016242243                                                                                                               | (21) EP14189227.3                                                                     |
| Barber, Terry Lee                                                                      | 2017080598                                                                                                               | (47) 14.07.2021                                                                       |
| (31) 201113069644                                                                      | (32) 23.08.2016                                                                                                          | (22) 16.10.2014                                                                       |
| (32) 23.03.2011                                                                        | 14.12.2016                                                                                                               | (54) Connector with a locking element with wings                                      |
| (33) United States of America                                                          | 14.04.2017                                                                                                               | (73) Hirschmann Automotive GmbH                                                       |
| (51) H01R 9/26                                                                         | (33) Japan                                                                                                               | (72) Bitschnau, René                                                                  |
| H01R 25/16                                                                             | Japan                                                                                                                    | Kalb, Markus                                                                          |
| H02B 1/20                                                                              | Japan                                                                                                                    | (31) 102013017152                                                                     |
| (11) EP3503318                                                                         | (51) H01R 12/57                                                                                                          | (32) 16.10.2013                                                                       |
| (21) EP18200065.3                                                                      | H01R 12/77                                                                                                               | (33) Germany                                                                          |
| (47) 07.07.2021                                                                        | H01R 13/62                                                                                                               | (51) H01R 13/64                                                                       |
| (22) 12.10.2018                                                                        | (11) EP3539185                                                                                                           | H02J 7/00                                                                             |
| (54) POWER DISTRIBUTION DEVICE IN PARTICULAR IN A CABINET OR AN ELECTRICAL PANEL       | (21) EP17808547.8                                                                                                        | (11) EP3627654                                                                        |
| (73) Schneider Electric Industries SAS                                                 | (47) 14.07.2021                                                                                                          | (21) EP19202919.7                                                                     |
| (72) BURNOT, Claude                                                                    | (87) FR2017053073                                                                                                        | (47) 07.07.2021                                                                       |
| BADIN, Didier                                                                          | 17.05.2018                                                                                                               | (22) 26.09.2016                                                                       |
| BOENSCH, Matthias                                                                      | (22) 10.11.2017                                                                                                          | (54) A VEHICLE CHARGING INTERFACE UNIT, A SYSTEM FOR CHARGING A VEHICLE AND A VEHICLE |
| (31) 1762689                                                                           | (54) TEXTILE DEVICE CAPABLE OF INTERACTING WITH AN ELECTRONIC DEVICE AND ASSOCIATED ELECTRONIC DEVICE                    | (73) Volvo Car Corporation                                                            |
| (32) 21.12.2017                                                                        | (73) Bioserenity                                                                                                         | (72) SCHERDIN, Björn                                                                  |
| (33) France                                                                            | (72) PROT, Pierre                                                                                                        | (51) H01R 13/646                                                                      |
| (51) H01R 12/50                                                                        | FROUIN, Pierre-Yves                                                                                                      | H01R 13/6473                                                                          |
| H01R 12/70                                                                             | (31) 1660937                                                                                                             | H01R 13/6581                                                                          |
| H01R 12/71                                                                             |                                                                                                                          | H01R 13/6593                                                                          |
| H01R 12/72                                                                             |                                                                                                                          |                                                                                       |
| H01R 12/73                                                                             |                                                                                                                          |                                                                                       |

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| H01R 4/18                                          | (32) 20.04.2015                                                                                                             | H01S 5/323                                           |
| (11) EP3618197                                     | (33) United Kingdom                                                                                                         | H01S 5/34                                            |
| (21) EP19191624.6                                  | (51) H01R 24/50                                                                                                             | (11) EP2291891                                       |
| (47) 07.07.2021                                    | H01R 13/52                                                                                                                  | (21) EP09754029.8                                    |
| (22) 14.08.2019                                    | H04N 5/225                                                                                                                  | (47) 07.07.2021                                      |
| (54) MULTICORE CABLE ASSEMBLY                      | (11) EP3384666                                                                                                              | (87) FI2009050438                                    |
| (73) Rosenberger Hochfrequenztechnik GmbH & Co. KG | (21) EP16701450.5                                                                                                           | 03.12.2009                                           |
| (72) LÖDDING, Thomas                               | (47) 07.07.2021                                                                                                             | (22) 26.05.2009                                      |
| SCHMID, Johannes                                   | (87) EP2016051292                                                                                                           | (54) SEMICONDUCTOR LASER                             |
| PICHLMAIER, Richard                                | 27.07.2017                                                                                                                  | (73) Oulun Yliopisto                                 |
| (31) 102018121239                                  | (22) 22.01.2016                                                                                                             | (72) RYVKIN, Boris                                   |
| (32) 30.08.2018                                    | (54) CAMERA MODULE                                                                                                          | KOSTAMOVARA, Juha                                    |
| (33) Germany                                       | (73) Rosenberger Hochfrequenztechnik GmbH & Co. KG                                                                          | (31) 20085512                                        |
| (51) H01R 13/6582                                  | (72) BIPPUS, Rainer                                                                                                         | (32) 28.05.2008                                      |
| H01R 13/18                                         | SCHMID, Johannes                                                                                                            | (33) Finland                                         |
| (11) EP3540865                                     | (51) H01R 25/14                                                                                                             | (51) H01S 5/183                                      |
| (21) EP19160510.4                                  | (11) EP3664228                                                                                                              | H01S 5/34                                            |
| (47) 14.07.2021                                    | (21) EP20153804.8                                                                                                           | (11) EP2878047                                       |
| (22) 04.03.2019                                    | (47) 07.07.2021                                                                                                             | (21) EP13823016.4                                    |
| (54) EXTERNAL CONDUCTOR ARRANGEMENT                | (22) 17.08.2010                                                                                                             | (47) 07.07.2021                                      |
| (73) Rosenberger Hochfrequenztechnik GmbH & Co. KG | (54) ELECTRIC RAIL SYSTEM WITH DOUBLE SIDED PICKUP                                                                          | (87) US2013052416                                    |
| (72) LÖDDING, Thomas                               | (73) Zumtobel Lighting GmbH                                                                                                 | 30.01.2014                                           |
| (31) 102018106004                                  | (72) Schwärzler, Erich                                                                                                      | (22) 26.07.2013                                      |
| 102019104754                                       | Ladstätter, Gerald                                                                                                          | (54) MEMS-TUNABLE SHORT CAVITY LASER                 |
| (32) 15.03.2018                                    | (31) 102009037764                                                                                                           | (73) Thorlabs, Inc.                                  |
| 25.02.2019                                         | (32) 17.08.2009                                                                                                             | Praevium Research, Inc.                              |
| (33) Germany                                       | (33) Germany                                                                                                                | (72) CABLE, Alex, Ezra                               |
| Germany                                            | (51) H01R 43/26                                                                                                             | JAYARAMAN, Vijaysekhar                               |
| (51) H01R 13/6592                                  | H02G 1/00                                                                                                                   | POTSAID, Benjamin, Michael                           |
| H01R 9/03                                          | H02G 1/14                                                                                                                   | (31) 201261676712 P                                  |
| H01R 13/52                                         | (11) EP3288128                                                                                                              | (32) 27.07.2012                                      |
| H01R 13/58                                         | (21) EP17187482.9                                                                                                           | (33) United States of America                        |
| (11) EP2667458                                     | (47) 14.07.2021                                                                                                             | (51) H01S 5/20                                       |
| (21) EP12736540.1                                  | (22) 23.08.2017                                                                                                             | H01S 5/22                                            |
| (47) 14.07.2021                                    | (54) METHOD AND SYSTEM FOR FACILITATING THE PLACEMENT OF A WORKPIECE INSIDE AN ELECTRICAL CONNECTOR AND THE REMOVAL THEREOF | H01S 5/30                                            |
| (87) JP2012050755                                  | (73) Ores Assets                                                                                                            | H01S 5/343                                           |
| 26.07.2012                                         | (72) Bodson, Denis                                                                                                          | (11) EP3375056                                       |
| (22) 16.01.2012                                    | (31) 201605657                                                                                                              | (21) EP16810102.0                                    |
| (54) CONNECTOR                                     | (32) 26.08.2016                                                                                                             | (47) 14.07.2021                                      |
| (73) Yazaki Corporation                            | (33) Belgium                                                                                                                | (87) PL2016050053                                    |
| (72) TANAKA, Masahiro                              | (51) H01S 3/03                                                                                                              | 18.05.2017                                           |
| KATO, Hajime                                       | H01S 3/038                                                                                                                  | (22) 10.11.2016                                      |
| (31) 2011010742                                    | H01S 3/223                                                                                                                  | (54) ALINGAN ALLOY BASED LASER DIODE                 |
| (32) 21.01.2011                                    | (11) EP3314706                                                                                                              | (73) TOP-GAN SPOLKA Z OGRANICZONA ODPOWIEDZIALNOSCIA |
| (33) Japan                                         | (21) EP16718463.9                                                                                                           | Instytut Wysokich Cisnien Polskiej Akademii Nauk     |
| (51) H01R 24/22                                    | (47) 14.07.2021                                                                                                             | (72) STANCZYK, Szymon                                |
| H01R 13/512                                        | (87) IB2016051582                                                                                                           | KAFAR, Anna                                          |
| H01R 13/58                                         | 29.12.2016                                                                                                                  | GRZANKA, Szymon                                      |
| H01R 13/627                                        | (22) 21.03.2016                                                                                                             | CZERNECKI, Robert                                    |
| H01R 13/633                                        | (54) MICROWAVE GAS SLAB LASER                                                                                               | SUSKI, Tadeusz                                       |
| H01R 13/635                                        | (73) Soreq Nuclear Research Center                                                                                          | PERLIN, Piotr                                        |
| H01R 13/639                                        | (72) SINTOV, Yoav                                                                                                           | (31) 41473915                                        |
| H01R 103/00                                        | ZALEVSKI, Zeev                                                                                                              | (32) 10.11.2015                                      |
| (11) EP3286808                                     | (31) 201562183243 P                                                                                                         | (33) Poland                                          |
| (21) EP16720473.4                                  | (32) 23.06.2015                                                                                                             | (51) H01T 13/20                                      |
| (47) 07.07.2021                                    | (33) United States of America                                                                                               | H01T 13/39                                           |
| (87) GB2016000086                                  | (51) H01S 5/042                                                                                                             | (11) EP3306762                                       |
| 27.10.2016                                         | H01S 5/062                                                                                                                  | (21) EP16799540.6                                    |
| (22) 20.04.2016                                    | H01S 5/065                                                                                                                  | (47) 14.07.2021                                      |
| (54) RE-WIREABLE ELECTRICAL CONNECTOR              | H01S 5/20                                                                                                                   | (87) JP2016002396                                    |
| (73) Scolmore International Limited                | H01S 5/32                                                                                                                   | 01.12.2016                                           |
| (72) HISCOKE, Daniel                               |                                                                                                                             | (22) 16.05.2016                                      |
| MCWILLIAMS, Liam                                   |                                                                                                                             | (54) SPARKPLUG                                       |
| (31) 201506683                                     |                                                                                                                             | (73) NGK Spark Plug Co., Ltd.                        |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (72) SUMOYAMA, Daisuke<br>NAKADA, Takuto<br>(31) 2015108261<br>(32) 28.05.2015<br>(33) Japan                                                                                                                                                                                                                                                                                                                                                                                                                                   | (54) CURRENT TRANSFORMER SUPPORT<br>DEVICE, AND SWITCHGEAR USING<br>SAID CURRENT TRANSFORMER<br>SUPPORT DEVICE<br>(73) Mitsubishi Electric Corporation                                                                                                                                                                                                                                                                                                                                                        | (51) H02G 3/32<br>H05K 7/14<br>(11) EP3282529<br>(21) EP17150926.8<br>(47) 14.07.2021<br>(22) 11.01.2017                                                                                                                                                                                                                                                                                                                                                       |
| (51) H01T 13/20<br>H01T 13/41<br>(11) EP3499658<br>(21) EP17839017.5<br>(47) 07.07.2021<br>(87) JP2017019934<br>15.02.2018<br>(22) 29.05.2017<br>(54) SPARK PLUG<br>(73) NGK Spark Plug Co., Ltd.<br>(72) TAKEDA, Yohei<br>UEGAKI, Hironori<br>(31) 2016158322<br>(32) 11.08.2016<br>(33) Japan                                                                                                                                                                                                                                | (72) KOZURU Susumu<br>NUMATA Shinichi<br>YAMAJI Yuichi<br>SASAKI Takahiro<br>(31) 2013224854<br>(32) 30.10.2013<br>(33) Japan                                                                                                                                                                                                                                                                                                                                                                                 | (54) CABLE MANAGEMENT ASSEMBLY<br>AND CABLE MANAGEMENT DEVICE<br>THEREOF<br>(73) King Slide Works Co., Ltd.<br>King Slide Technology Co., Ltd.<br>(72) Chen, Ken-Ching<br>Yang, Shun-Ho<br>Yu, Kai-Wen<br>Wang, Chun-Chiang<br>(31) 105126011<br>(32) 12.08.2016<br>(33) Taiwan, Province of China                                                                                                                                                             |
| (51) H02B 1/056<br>H02B 1/21<br>H02G 5/00<br>(11) EP3555977<br>(21) EP17822639.5<br>(47) 14.07.2021<br>(87) EP2017083058<br>28.06.2018<br>(22) 15.12.2017<br>(54) MULTI-PHASE BUSBAR FOR<br>CONDUCTING ELECTRIC ENERGY<br>AND METHOD OF MANUFACTURING<br>THE SAME<br>(73) ABB Schweiz AG<br>(72) VELTHUIS, Rudi<br>KRIVDA, Andrej<br>(31) 16205013<br>16205020<br>16205023<br>(32) 19.12.2016<br>19.12.2016<br>19.12.2016<br>(33) European Patent Office (EPO)<br>European Patent Office (EPO)<br>European Patent Office (EPO) | (51) H02G 1/00<br>H02G 1/12<br>(11) EP3402020<br>(21) EP17170281.4<br>(47) 07.07.2021<br>(22) 09.05.2017<br>(54) CABLE PROCESSING MACHINE AND<br>METHOD FOR TRIMMING A CABLE<br>(73) Schleuniger AG<br>(72) WALSER, Markus<br>(51) H02G 3/04<br>(11) EP3422508<br>(21) EP18180229.9<br>(47) 14.07.2021<br>(22) 27.06.2018<br>(54) METHOD OF MANUFACTURING A<br>MESH CABLE TRAY<br>(73) Unex Aparellaje Electrico S.L.<br>(72) MOSTAZO OVIEDO, José Antonio<br>(31) 201730864<br>(32) 29.06.2017<br>(33) Spain | (51) H02G 15/18<br>H02G 15/188<br>(11) EP2656465<br>(21) EP10805206.9<br>(47) 14.07.2021<br>(87) EP2010007853<br>28.06.2012<br>(22) 22.12.2010<br>(54) SCREEN CONNECTOR FOR<br>ELECTRICAL CABLES AND JOINTING<br>ASSEMBLY COMPRISING SAID<br>SCREEN CONNECTOR<br>(73) Prysmian S.p.A.<br>(72) PORTAS, Francesco<br>COLLINA, Tania<br>GRACIA ALONSO, Javier                                                                                                     |
| (51) H02B 5/06<br>H02B 13/02<br>(11) EP2947733<br>(21) EP13871446.4<br>(47) 07.07.2021<br>(87) JP2013065156<br>24.07.2014<br>(22) 31.05.2013<br>(54) GAS-INSULATED SWITCH GEAR<br>(73) Mitsubishi Electric Corporation<br>(72) KAGAWA Koichi<br>YOSHIDA Tadahiro<br>ARIOKA Masahiro<br>(31) 2013004281<br>(32) 15.01.2013<br>(33) Japan                                                                                                                                                                                        | (51) H02G 3/04<br>(11) EP3291392<br>(21) EP17186571.0<br>(47) 14.07.2021<br>(22) 17.08.2017<br>(54) CABLE TRAY<br>(73) Unex Aparellaje Electrico S.L.<br>(72) MOSTAZO OVIEDO, José Antonio<br>(31) 201631073<br>(32) 01.09.2016<br>(33) Spain                                                                                                                                                                                                                                                                 | (51) H02H 1/04<br>H02H 3/08<br>H02H 7/22<br>(11) EP3041101<br>(21) EP15201441.1<br>(47) 14.07.2021<br>(22) 18.12.2015<br>(54) SYSTEM FOR IMPROVING LIGHTNING<br>IMMUNITY FOR A SOLID STATE<br>POWER CONTROLLER<br>(73) Honeywell International Inc.<br>(72) POULOSE, Ezekiel<br>KUNNAMBATH, Vinod<br>K Prashant Purusmotham Prabhu<br>RAO, Narendra<br>LIU, Zhenning<br>FULLER, Randy<br>(31) 201514588530<br>(32) 02.01.2015<br>(33) United States of America |
| (51) H02B 11/04<br>(11) EP3065239<br>(21) EP14857557.4<br>(47) 14.07.2021<br>(87) JP2014054021<br>07.05.2015<br>(22) 20.02.2014                                                                                                                                                                                                                                                                                                                                                                                                | (51) H02G 3/06<br>H02G 3/22<br>(11) EP3483996<br>(21) EP18205450.2<br>(47) 07.07.2021<br>(22) 09.11.2018<br>(54) ASSEMBLY FOR A CABLE<br>FEEDTHROUGH<br>(73) CONTA-CLIP Verbindungstechnik GmbH<br>(72) Nowastowski-Stock, Jörg<br>(31) 202017106818 U<br>(32) 09.11.2017<br>(33) Germany<br>(51) H02G 3/22<br>(11) EP3093938<br>(21) EP15167335.7<br>(47) 14.07.2021<br>(22) 12.05.2015<br>(54) HIGH VOLTAGE IMPLEMENTATION<br>SYSTEM<br>(73) Siemens Energy Global GmbH & Co. KG<br>(72) Findeisen, Jörg    | (51) H02H 3/04<br>H02H 3/16<br>H02H 7/20<br>H02J 1/10<br>H02J 3/38<br>H02S 50/00<br>G01R 31/08<br>G01R 31/40<br>G01R 31/52<br>(11) EP3264550<br>(21) EP17171238.3<br>(47) 07.07.2021<br>(22) 16.05.2017                                                                                                                                                                                                                                                        |

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|------------------------------------------------------------------------------------------------|----------------------------------------|--------------------------------------|
| (54) ACCESS CONTROL METHOD FOR<br>PARALLEL DIRECT CURRENT POWER<br>SUPPLIES AND DEVICE THEREOF | H02M 1/32<br>H02P 29/02<br>B60L 3/00   | (73) Supergrid Institute             |
| (73) Sungrow Power Supply Co., Ltd.                                                            | (11) EP3224079                         | (72) ZAMA, Ahmed                     |
| (72) NI, Hua                                                                                   | (21) EP15820211.9                      | ROMERO RODRIGUEZ, Miguel             |
| DAI, Shangfang                                                                                 | (47) 14.07.2021                        | BENCHAI, Abdelkrim                   |
| YU, Yanfei                                                                                     | (87) FR2015053169                      | LUSCAN, Bruno                        |
| YANG, Zongjun                                                                                  | 02.06.2016                             | (31) 1753433                         |
| (31) 201610464032                                                                              | (22) 23.11.2015                        | (32) 20.04.2017                      |
| (32) 21.06.2016                                                                                | (54) INVERTER WITH IMPROVED SAFETY     | (33) France                          |
| (33) China                                                                                     | (73) Valeo Systèmes de Contrôle Moteur |                                      |
| (51) H02H 3/06                                                                                 | (72) CONDAMIN, Bruno                   | (51) H02J 1/10                       |
| H02H 7/26                                                                                      | DE SOUSA, Luis                         | H02J 7/00                            |
| H02J 3/36                                                                                      | ZOU, Liyu                              | H02J 7/34                            |
| (11) EP3306766                                                                                 | COIA-HURET, Nathalie                   | (11) EP3185388                       |
| (21) EP16803084.9                                                                              | (31) 1461351                           | (21) EP16204678.3                    |
| (47) 07.07.2021                                                                                | (32) 24.11.2014                        | (47) 14.07.2021                      |
| (87) JP2016064998                                                                              | (33) France                            | (22) 16.12.2016                      |
| 08.12.2016                                                                                     | (51) H02J 1/00                         | (54) BATTERY CONTROL METHOD AND      |
| (22) 20.05.2016                                                                                | H02J 1/06                              | APPARATUS, AND BATTERY PACK          |
| (54) DIRECT CURRENT POWER                                                                      | H02J 7/00                              | (73) Samsung Electronics Co., Ltd    |
| TRANSMISSION SYSTEM, CENTRAL                                                                   | H02J 7/34                              | (72) KIM, Young Jae                  |
| SERVER OF SAME, AND METHOD                                                                     | H02M 7/483                             | YEO, Taejung                         |
| FOR RESTORING DIRECT CURRENT                                                                   | (11) EP3507883                         | (31) 20150182752                     |
| POWER TRANSMISSION PATHWAY                                                                     | (21) EP17847114.0                      | (32) 21.12.2015                      |
| AFTER FAILURE                                                                                  | (47) 14.07.2021                        | (33) Korea (Republic)                |
| (73) Kabushiki Kaisha Toshiba                                                                  | (87) US2017029862                      |                                      |
| Toshiba Energy Systems & Solutions                                                             | 08.03.2018                             | (51) H02J 3/00                       |
| Corporation                                                                                    | (22) 27.04.2017                        | H02J 3/38                            |
| (72) KANAYA, Kazuhisa                                                                          | (54) SYSTEMS AND METHODS FOR           | H04L 9/06                            |
| OHDA, Yoshiaki                                                                                 | CHARGING AND DISCHARGING               | (11) EP3602720                       |
| HASEGAWA, Ryuta                                                                                | ACTIVE POWER LINK MODULES IN           | (21) EP17714425.0                    |
| NIWA, Yoshimitsu                                                                               | DIRECT CURRENT POWER SYSTEM            | (47) 07.07.2021                      |
| NAOI, Shinya                                                                                   | (73) General Electric Company          | (87) EP2017057414                    |
| WANG, Mian                                                                                     | (72) SADILEK, Tomas                    | 04.10.2018                           |
| ANDO, Masayuki                                                                                 | ZHOU, Rui                              | (22) 29.03.2017                      |
| (31) 2015110746                                                                                | ZHOU, Zhi                              | (54) METHOD OF OPERATING AN          |
| (32) 29.05.2015                                                                                | CIOFFI, Philip, Michael                | ELECTRICAL GRID                      |
| (33) Japan                                                                                     | DONG, Dong                             | (73) CONJOULE GMBH                   |
| (51) H02H 3/087                                                                                | (31) 201615253091                      | (72) HEINTEL, Franziska              |
| H02H 3/093                                                                                     | (32) 31.08.2016                        | WARBURTON, Sam                       |
| H02H 5/04                                                                                      | (33) United States of America          | WAFFNER, Jürgen                      |
| H02H 6/00                                                                                      | (51) H02J 1/08                         |                                      |
| H02H 7/00                                                                                      | H02J 1/14                              | (51) H02J 3/00                       |
| H02H 7/08                                                                                      | H02J 3/00                              | H02J 13/00                           |
| H02H 7/12                                                                                      | H02J 3/28                              | (11) EP3336995                       |
| H02M 3/156                                                                                     | H02J 3/36                              | (21) EP16204939.9                    |
| H03K 17/08                                                                                     | H02J 3/46                              | (47) 07.07.2021                      |
| H03K 17/082                                                                                    | H02J 4/00                              | (22) 19.12.2016                      |
| H02M 1/32                                                                                      | H02J 7/00                              | (54) METHOD, CONTROL DEVICE          |
| (11) EP3404790                                                                                 | H02J 7/34                              | AND SYSTEM FOR DETERMINING           |
| (21) EP17738533.3                                                                              | H02J 9/06                              | STATE VALUES FOR DESCRIBING          |
| (47) 14.07.2021                                                                                | H02J 13/00                             | OPERATING STATES IN A                |
| (87) JP2017001022                                                                              | H02M 7/00                              | SUBNETWORK OF AN ENERGY              |
| 20.07.2017                                                                                     | H02M 7/217                             | SUPPLY NETWORK                       |
| (22) 13.01.2017                                                                                | H02M 7/25                              | (73) Siemens Aktiengesellschaft      |
| (54) POWER SUPPLY CONTROL DEVICE                                                               | H02M 1/36                              | (72) Duckheim, Mathias               |
| (73) AutoNetworks Technologies, Ltd.                                                           | H02M 7/483                             | Fröhner, Wiebke                      |
| Sumitomo Wiring Systems, Ltd.                                                                  | H02J 5/00                              | Most, Dieter                         |
| Sumitomo Electric Industries, Ltd.                                                             | (11) EP3613120                         | Werner, Thomas                       |
| (72) SAWANO, Shunichi                                                                          | (21) EP18717077.4                      |                                      |
| SUGISAWA, Yuuki                                                                                | (47) 14.07.2021                        | (51) H02J 3/01                       |
| ODA, Kota                                                                                      | (87) EP2018059849                      | H02M 1/12                            |
| MASE, Keisuke                                                                                  | 25.10.2018                             | (11) EP3579367                       |
| (31) 2016006371                                                                                | (22) 18.04.2018                        | (21) EP17895446.7                    |
| (32) 15.01.2016                                                                                | (54) DEVICE FOR CONTROLLING A          | (47) 07.07.2021                      |
| (33) Japan                                                                                     | TERMINAL FOR POWER RECOVERY            | (87) JP2017003810                    |
| (51) H02H 7/08                                                                                 | IN A FACILITY                          | 09.08.2018                           |
|                                                                                                |                                        | (22) 02.02.2017                      |
|                                                                                                |                                        | (54) HIGHER HARMONIC SUPPRESSION     |
|                                                                                                |                                        | DEVICE AND HIGHER HARMONIC           |
|                                                                                                |                                        | SUPPRESSION SYSTEM                   |
|                                                                                                |                                        | (73) Mitsubishi Electric Corporation |
|                                                                                                |                                        | (72) IWAZAKI, Kenji                  |

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|----------------------------------------|-----------------------------------------|-----------------------------------------|
| ARISAWA, Koichi                        | (47) 14.07.2021                         | LIAO, Fuchun                            |
| (51) H02J 3/26                         | (87) EP2017061992                       | LIU, Nianfeng                           |
| H02J 3/32                              | 22.11.2018                              | HU, Yuanxiang                           |
| H02J 7/04                              | (22) 18.05.2017                         | (31) 201410043139                       |
| H02J 7/14                              | (54) DETERMINING SETPOINT               | (32) 28.01.2014                         |
| H02J 7/02                              | PARAMETERS FOR CONTROLLING AN           | (33) China                              |
| (11) EP3579368                         | HVDC LINK                               | (51) H02J 7/00                          |
| (21) EP19188436.0                      | (73) ABB Power Grids Switzerland AG     | H02J 7/04                               |
| (47) 07.07.2021                        | (72) BERGGREN, Bertil                   | (11) EP2201660                          |
| (22) 15.02.2016                        | ZHANG, Lidong                           | (21) EP08839567.8                       |
| (54) ENERGY STORAGE SYSTEM             | LARSSON, Mats                           | (47) 07.07.2021                         |
| (73) Cummins Power Generation IP, Inc. | (51) H02J 3/36                          | (87) KR2008006107                       |
| (72) HUNT, Michelle                    | H02J 3/38                               | 23.04.2009                              |
| AYANA, Elias M.                        | H02M 1/14                               | (22) 16.10.2008                         |
| PALMER, Bradford K.                    | H02M 3/335                              | (54) BATTERY MANAGEMENT SYSTEM          |
| (31) 201514626190                      | (11) EP3435531                          | WITH INTEGRATION OF VOLTAGE             |
| (32) 19.02.2015                        | (21) EP16895531.8                       | SENSOR AND CHARGE EQUALIZER             |
| (33) United States of America          | (47) 07.07.2021                         | (73) SK Innovation Co., Ltd.            |
| (51) H02J 3/32                         | (87) JP2016087826                       | Korea Advanced Institute of Science and |
| H02J 3/38                              | 28.09.2017                              | Technology                              |
| (11) EP3381102                         | (22) 19.12.2016                         | (72) LEE, Joong Hui                     |
| (21) EP16805346.0                      | (54) ELECTRIC POWER CONVERSION          | JANG, Soo Yeup                          |
| (47) 07.07.2021                        | DEVICE                                  | OH, Jeon Keun                           |
| (87) EP2016078690                      | (73) Mitsubishi Electric Corporation    | MOON, Gun Woo                           |
| 01.06.2017                             | (72) ISHIBASHI Takaharu                 | PARK, Hong Sun                          |
| (22) 24.11.2016                        | JIMICHI Takushi                         | KIM, Chol Ho                            |
| (54) DOMESTIC ENERGY GENERATION        | (31) 2016056407                         | (31) 20070104105                        |
| INSTALLATION AND OPERATING             | (32) 22.03.2016                         | (32) 16.10.2007                         |
| METHOD FOR OPERATING A                 | (33) Japan                              | (33) Korea (Republic)                   |
| DOMESTIC ENERGY GENERATION             | (51) H02J 3/36                          | (51) H02J 7/00                          |
| INSTALLATION                           | H02M 1/00                               | H02J 50/10                              |
| (73) HPS Home Power Solutions GmbH     | H02M 7/19                               | H02J 50/12                              |
| (72) HIERL, Andreas                    | H02M 7/25                               | B60L 53/12                              |
| RADUE, Dirk                            | H02M 7/483                              | B60L 58/12                              |
| SCHNEIDER, Gunnar                      | H02M 7/487                              | B60L 58/19                              |
| BENZ, Uwe                              | F03D 9/25                               | (11) EP3373406                          |
| SCHRÖDER, Kevin                        | (11) EP3001556                          | (21) EP16861905.4                       |
| ABUL-ELLA, Zeyad                       | (21) EP14800428.6                       | (47) 14.07.2021                         |
| (31) 102015120450                      | (47) 14.07.2021                         | (87) JP2016080559                       |
| (32) 25.11.2015                        | (87) CN2014072492                       | 11.05.2017                              |
| (33) Germany                           | 27.11.2014                              | (22) 14.10.2016                         |
| (51) H02J 3/32                         | (22) 25.02.2014                         | (54) CHARGING CONTROL DEVICE            |
| H02J 3/38                              | (54) HYBRID CONVERTER AND WIND          | (73) IHI Corporation                    |
| H02J 9/06                              | POWER GENERATION SYSTEM                 | (72) NIIZUMA Motonao                    |
| H02M 1/36                              | (73) Huazhong University of Science and | (31) 2015218505                         |
| H02M 7/48                              | Technology                              | (32) 06.11.2015                         |
| H02M 7/5387                            | (72) LIN, Weixing                       | (33) Japan                              |
| (11) EP3451522                         | WEN, Jinyu                              | (51) H02J 7/00                          |
| (21) EP17789630.5                      | WANG, Shaorong                          | H04B 5/00                               |
| (47) 07.07.2021                        | CHENG, Shijie                           | H04W 48/16                              |
| (87) JP2017016630                      | (31) 201310191463                       | H04W 48/20                              |
| 02.11.2017                             | (32) 22.05.2013                         | H04W 84/12                              |
| (22) 26.04.2017                        | (33) China                              | H02J 50/05                              |
| (54) SYSTEM INCLUDING A POWER          | (51) H02J 7/00                          | H02J 50/10                              |
| SUPPLY CONTROL APPARATUS AND           | H02J 7/02                               | (11) EP3667861                          |
| A SWITCHING DEVICE, DISTRIBUTED        | (11) EP3101767                          | (21) EP20155907.7                       |
| POWER SUPPLY SYSTEM COMPRISING         | (21) EP14881229.0                       | (47) 14.07.2021                         |
| THE SYSTEM AND CONTROL                 | (47) 07.07.2021                         | (22) 10.09.2012                         |
| METHOD FOR THE POWER SUPPLY            | (87) CN2014077287                       | (54) WIRELESS POWER RECEIVER AND        |
| CONTROL APPARATUS                      | 06.08.2015                              | CONTROL METHOD THEREOF                  |
| (73) Kyocera Corporation               | (22) 12.05.2014                         | (73) Samsung Electronics Co., Ltd.      |
| (72) SUZUKI Yuki                       | (54) ELECTRONIC DEVICE AND POWER        | (72) Lee, Kyung-Woo                     |
| (31) 2016088630                        | ADAPTER THEREFOR                        | Won, Eun-Tae                            |
| (32) 26.04.2016                        | (73) GUANGDONG OPPO MOBILE              | Lee, Young-Min                          |
| (33) Japan                             | TELECOMMUNICATIONS CORP., LTD.          | Park, Se-Ho                             |
| (51) H02J 3/36                         | (72) ZHANG, Jialiang                    | Kang, Noh-Gyoung                        |
| (11) EP3625867                         | WU, Kewei                               | Byun, Kang-Ho                           |
| (21) EP17724807.7                      | ZHANG, Jun                              | (31) 201161532350 P                     |



|                                            |                                           |                                           |
|--------------------------------------------|-------------------------------------------|-------------------------------------------|
| (32) 08.09.2011                            | 02.11.2012                                | GENERATOR AND WIND TURBINE                |
| (33) United States of America              | 08.07.2013                                | HAVING SAME                               |
| (51) H02J 7/04                             | (33) United States of America             | (73) Wobben Properties GmbH               |
| H02J 7/34                                  | United States of America                  | (72) RÖER, Jochen                         |
| H02M 3/155                                 | Japan                                     | (31) 102016217173                         |
| (11) EP3082216                             | (51) H02J 50/10                           | (32) 09.09.2016                           |
| (21) EP15163519.0                          | (11) EP3465870                            | (33) Germany                              |
| (47) 14.07.2021                            | (21) EP17728947.7                         | (51) H02K 1/22                            |
| (22) 14.04.2015                            | (47) 14.07.2021                           | H02K 1/24                                 |
| (54) ELECTRONIC CHARGER FOR                | (87) NL2017050323                         | H02K 15/02                                |
| MEDIUM VOLTAGE INSTALLATIONS               | 30.11.2017                                | (11) EP2840678                            |
| AND CONTROL METHOD THEREOF                 | (22) 23.05.2017                           | (21) EP14177512.2                         |
| (73) ABB Schweiz AG                        | (54) A METHOD, A CONTROLLER AND A         | (47) 07.07.2021                           |
| (72) Bianco, Andrea                        | NETWORK                                   | (22) 17.07.2014                           |
| Ricci, Andrea                              | (73) Optimos Apto B.V.                    | (54) System and method for smoothing a    |
| De Natale, Gabriele Valentino              | (72) VAN DER PIJL, Frederik Frank Arie    | salient rotor in electrical machines      |
| Testa, Marco                               | (31) 2016810                              | (73) General Electric Company             |
| (51) H02J 9/06                             | (32) 23.05.2016                           | (72) Raminosa, Tsarafidy                  |
| H02M 1/00                                  | (33) Netherlands                          | Alexander, James Pellegrino               |
| H02M 1/42                                  | (51) H02K 1/14                            | El-Refaie, Ayman Mohamed Fawzi            |
| (11) EP2991210                             | H02K 1/16                                 | Torrey, David A.                          |
| (21) EP15179498.9                          | H02K 3/32                                 | (31) 201313949406                         |
| (47) 07.07.2021                            | H02K 3/34                                 | (32) 24.07.2013                           |
| (22) 03.08.2015                            | (11) EP3289668                            | (33) United States of America             |
| (54) SPLIT RAIL PFC AND AC INVERTER        | (21) EP16716880.6                         | (51) H02K 1/24                            |
| ARCHITECTURE                               | (47) 07.07.2021                           | H02K 1/27                                 |
| (73) Astronics Advanced Electronic Systems | (87) EP2016058551                         | H02K 16/00                                |
| Corp.                                      | 03.11.2016                                | H02K 16/02                                |
| (72) Wambsganss, Warren                    | (22) 18.04.2016                           | (11) EP3454458                            |
| Jouper, Jeffrey A.                         | (54) STATOR HAVING ADAPTED TOOTH          | (21) EP18187538.6                         |
| (31) 201414471998                          | GEOMETRY                                  | (47) 07.07.2021                           |
| (32) 28.08.2014                            | (73) EBM-Papst Mulfingen GmbH&CO. KG      | (22) 06.08.2018                           |
| (33) United States of America              | (72) STURM, Michael                       | (54) A PROCESS FOR ASSEMBLING A           |
| (51) H02J 50/00                            | (31) 102015106523                         | ROTOR OF A VARIABLE-RELUCTANCE            |
| (11) EP3179602                             | (32) 28.04.2015                           | SYNCHRONOUS MOTOR, AND THE                |
| (21) EP16203730.3                          | (33) Germany                              | ROTOR                                     |
| (47) 07.07.2021                            | (51) H02K 1/14                            | (73) DANA TM4 ITALIA S.R.L.               |
| (22) 01.11.2013                            | H02K 3/04                                 | (72) PACE, Alberto                        |
| (54) WIRELESS POWER TRANSMISSION           | H02K 21/22                                | (31) 201700100814                         |
| SYSTEM                                     | H02K 21/24                                | (32) 08.09.2017                           |
| (73) Panasonic Intellectual Property       | (11) EP1990894                            | (33) Italy                                |
| Management Co., Ltd.                       | (21) EP07024335.7                         | (51) H02K 1/24                            |
| (72) KANNO, Hiroshi                        | (47) 14.07.2021                           | H02K 19/06                                |
| ASANUMA, Kenichi                           | (22) 14.12.2007                           | H02K 19/14                                |
| (31) 201261721698 P                        | (54) Stator for permanent magnet electric | H02K 21/46                                |
| 201261721729 P                             | motor using soft magnetic composites      | (11) EP3557736                            |
| 2013142483                                 | (73) Danfoss Power Solutions (US) Company | (21) EP17882054.4                         |
| (32) 02.11.2012                            | (72) Ley, Josh                            | (47) 07.07.2021                           |
| 02.11.2012                                 | Chieduko, Victor                          | (87) KR2017014637                         |
| 08.07.2013                                 | Frazzini, Jeff                            | 21.06.2018                                |
| (33) United States of America              | Lewis, Kevin                              | (22) 13.12.2017                           |
| United States of America                   | Caffery, Philip                           | (54) LINE START SYNCHRONOUS               |
| Japan                                      | (31) 747451                               | RELUCTANCE MOTOR AND ROTOR                |
| (51) H02J 50/00                            | (32) 11.05.2007                           | THEREOF                                   |
| (11) EP3179600                             | (33) United States of America             | (73) Hyosung Heavy Industries Corporation |
| (21) EP16203723.8                          | (51) H02K 1/16                            | (72) LEE, Su Jin                          |
| (47) 14.07.2021                            | H02K 1/18                                 | FANG, Liang                               |
| (22) 01.11.2013                            | H02K 1/20                                 | (31) 20160173018                          |
| (54) WIRELESS POWER TRANSMISSION           | (11) EP3510690                            | (32) 16.12.2016                           |
| SYSTEM                                     | (21) EP17764383.0                         | (33) Korea (Republic)                     |
| (73) Panasonic Intellectual Property       | (47) 14.07.2021                           | (51) H02K 1/27                            |
| Management Co., Ltd.                       | (87) EP2017072428                         | H02K 15/03                                |
| (72) KANNO, Hiroshi                        | 15.03.2018                                | (11) EP3637588                            |
| ASANUMA, Kenichi                           | (22) 07.09.2017                           | (21) EP18813042.1                         |
| (31) 201261721698 P                        | (54) SEGMENT SHEET FOR A STATOR           | (47) 07.07.2021                           |
| 201261721729 P                             | LAMINATION STACK, STATOR                  | (87) JP2018018312                         |
| 2013142483                                 | LAMINATION STACK, AND                     | 13.12.2018                                |
| (32) 02.11.2012                            |                                           | (22) 11.05.2018                           |

|                                         |                                      |                                               |
|-----------------------------------------|--------------------------------------|-----------------------------------------------|
| (54) ROTOR STRUCTURE OF MOTOR           | (73) Hamilton Sundstrand Corporation | (87) CN2016073257                             |
| (73) Kabushiki Kaisha Toyota Jidoshokki | (72) GROSSKOPF, Andrew P.            | 10.08.2017                                    |
| (72) TOIDA Naotaka                      | (31) 201715649761                    | (22) 03.02.2016                               |
| (31) 2017110897                         | (32) 14.07.2017                      | (54) DISC MOTOR                               |
| (32) 05.06.2017                         | (33) United States of America        | (73) Yuzen Sustainable Energy Co., Ltd.       |
| (33) Japan                              | (51) H02K 5/173                      | Yuzen (HK) Sustainable Energy Co., Ltd        |
| (51) H02K 3/04                          | H02K 5/24                            | Yuzen Sustainable Energy Pte Ltd              |
| H02K 3/12                               | H02K 9/22                            | (72) HSU, Yung-shun                           |
| H02K 3/28                               | H02K 11/215                          | HSU, Ming-chun                                |
| H02K 15/00                              | H02K 11/30                           | HSU, Wen-yu                                   |
| H02K 15/06                              | (11) EP3516758                       | (51) H02M 1/00                                |
| H02K 15/085                             | (21) EP17844637.3                    | H02M 3/158                                    |
| (11) EP3651318                          | (47) 14.07.2021                      | (11) EP3644487                                |
| (21) EP18859458.4                       | (87) EP2017081779                    | (21) EP19154150.7                             |
| (47) 07.07.2021                         | 28.06.2018                           | (47) 07.07.2021                               |
| (87) JP2018034865                       | (22) 07.12.2017                      | (22) 29.01.2019                               |
| 28.03.2019                              | (54) HOUSING FOR AN ELECTRIC         | (54) POWER CONVERTER SYSTEM AND               |
| (22) 20.09.2018                         | MACHINE WITH A COOLING DEVICE        | COUPLED TWO-STAGE INDUCTOR                    |
| (54) METHOD FOR MANUFACTURING           | (73) MELECS EWS GmbH                 | (73) Industrial Technology Research Institute |
| ARMATURE FOR DYNAMO-                    | (72) NEUMANN, Gerhard                | (72) Tsai, Wen-Tien                           |
| ELECTRICAL MACHINE                      | HELLINGER, Leopold                   | Chen, Yu-Jen                                  |
| (73) AISIN AW CO., LTD.                 | LEX, Manfred                         | Abdelmessih, Guirguis Z.                      |
| (72) KOGA Kiyotaka                      | (31) 511602016                       | Alonso Alvarez, Jose Marcos                   |
| SUGIHARA Tomotsugu                      | (32) 20.12.2016                      | (31) 10738097                                 |
| (31) 2017180635                         | (33) Austria                         | (32) 26.10.2018                               |
| 2018058080                              | (51) H02K 5/22                       | (33) Taiwan, Province of China                |
| (32) 20.09.2017                         | (11) EP2690758                       | (51) H02M 1/10                                |
| 26.03.2018                              | (21) EP13177913.4                    | H02J 7/02                                     |
| (33) Japan                              | (47) 14.07.2021                      | (11) EP3657660                                |
| Japan                                   | (22) 24.07.2013                      | (21) EP17925647.4                             |
| (51) H02K 3/12                          | (54) Motor                           | (47) 07.07.2021                               |
| H02K 3/28                               | (73) LG Innotek Co., Ltd.            | (87) CN2017103010                             |
| (11) EP3375072                          | (72) Chang, Dong Geun                | 28.03.2019                                    |
| (21) EP16791423.3                       | (31) 20120082105                     | (22) 22.09.2017                               |
| (47) 14.07.2021                         | (32) 27.07.2012                      | (54) POWER SUPPLY CIRCUIT, POWER              |
| (87) EP2016076944                       | (33) Korea (Republic)                | SUPPLY DEVICE, AND CONTROL                    |
| 18.05.2017                              | (51) H02K 11/33                      | METHOD                                        |
| (22) 08.11.2016                         | (11) EP3363105                       | (73) GUANGDONG OPPO MOBILE                    |
| (54) ELECTRICAL MACHINE COMPRISING      | (21) EP16779125.0                    | TELECOMMUNICATIONS CORP., LTD.                |
| A PRINTED CIRCUIT BOARD                 | (47) 07.07.2021                      | (72) TIAN, Chen                               |
| ARRANGEMENT FOR WINDING                 | (87) EP2016074377                    | ZHANG, Jialiang                               |
| INTERCONNECTION AND                     | 20.04.2017                           | (51) H02M 1/10                                |
| ASSOCIATED PRODUCTION METHOD            | (22) 11.10.2016                      | H02M 3/335                                    |
| (73) Vitesco Technologies GmbH          | (54) CIRCUIT BOARD, NON-DRIVE END    | H02M 7/06                                     |
| (72) JASTER, Magnus                     | SHIELD, MOTOR KIT, AND ELECTRIC      | H02M 7/219                                    |
| (31) 102015221923                       | MOTOR                                | (11) EP2391522                                |
| (32) 09.11.2015                         | (73) Lenze Drives GmbH               | (21) EP10703704.6                             |
| (33) Germany                            | (72) WETTLAUER, Jan                  | (47) 07.07.2021                               |
| (51) H02K 3/493                         | HÜBNER, Karsten                      | (87) IB2010050401                             |
| (11) EP3457536                          | EHlich, Martin                       | 05.08.2010                                    |
| (21) EP17191123.3                       | (31) 102015219867                    | (22) 29.01.2010                               |
| (47) 07.07.2021                         | (32) 13.10.2015                      | (54) DC/DC CONVERTER AND AC/DC                |
| (22) 14.09.2017                         | (33) Germany                         | CONVERTER                                     |
| (54) COVERING ELEMENT FOR               | (51) H02K 21/02                      | (73) Brusa Elektronik AG                      |
| COVERING A SLOT BETWEEN TWO             | (11) EP3447888                       | (72) KRAUSE, Axel                             |
| ADJACENT TOOTH TIPS OF AN               | (21) EP17465540.7                    | (31) 1362009                                  |
| ELECTROMAGNETIC MACHINE                 | (47) 14.07.2021                      | 148377 P                                      |
| (73) Siemens Gamesa Renewable Energy A/ | (22) 22.08.2017                      | 10592009                                      |
| S                                       | (54) ROTOR FOR AN ELECTRIC MACHINE   | (32) 29.01.2009                               |
| (72) SAMANTA, Subhra                    | OF A VEHICLE                         | 29.01.2009                                    |
| THOUGAARD, Hans-Joergen                 | (73) Vitesco Technologies GmbH       | 08.07.2009                                    |
| (51) H02K 5/10                          | (72) Murgoci, Dragos                 | (33) Switzerland                              |
| (11) EP3429066                          | (51) H02K 21/24                      | United States of America                      |
| (21) EP18183639.6                       | H02K 29/12                           | Switzerland                                   |
| (47) 07.07.2021                         | (11) EP3413444                       | (51) H02M 1/32                                |
| (22) 16.07.2018                         | (21) EP16888678.6                    | (11) EP3619802                                |
| (54) PERMANENT MAGNET GENERATOR         | (47) 07.07.2021                      | (21) EP18722959.6                             |
| CASE VENT VALVE                         |                                      | (47) 07.07.2021                               |

|                                                              |                                                                          |                                                                                                                                              |
|--------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| (87) EP2018061339<br>08.11.2018                              | (32) 07.03.2017<br>05.03.2018                                            | (11) EP3490134<br>(21) EP18208059.8                                                                                                          |
| (22) 03.05.2018                                              | (33) United States of America                                            | (47) 07.07.2021                                                                                                                              |
| (54) WIND TURBINE WITH OVERLOAD-<br>CAPABLE CONVERTER SYSTEM | United States of America                                                 | (22) 23.11.2018                                                                                                                              |
| (73) Wobben Properties GmbH                                  | (51) H02M 3/28                                                           | (54) PRETENSIONED INERTIAL DRIVE AND<br>METHOD THEREFOR                                                                                      |
| (72) BROMBACH, Johannes                                      | H02M 1/32                                                                | (73) Picofine GmbH                                                                                                                           |
| (31) 102017109728                                            | (11) EP2853023                                                           | (72) Kortschack, Axel                                                                                                                        |
| (32) 05.05.2017                                              | (21) EP12877236.5                                                        | (31) 102017127745                                                                                                                            |
| (33) Germany                                                 | (47) 07.07.2021                                                          | (32) 23.11.2017                                                                                                                              |
| (51) H02M 1/32                                               | (87) US2012038789                                                        | (33) Germany                                                                                                                                 |
| H02M 1/36                                                    | 28.11.2013                                                               | (51) H02P 1/02                                                                                                                               |
| H02M 7/487                                                   | (22) 21.05.2012                                                          | H02P 1/30                                                                                                                                    |
| (11) EP3493381                                               | (54) DC/DC POWER CONVERTER                                               | H02P 21/18                                                                                                                                   |
| (21) EP18174276.8                                            | CONTROL STRATEGY FOR SOURCE<br>PROTECTION                                | (11) EP2611025                                                                                                                               |
| (47) 07.07.2021                                              | (73) Audi AG                                                             | (21) EP11195971.4                                                                                                                            |
| (22) 25.05.2018                                              | (72) VARIGONDA, Subbarao                                                 | (47) 14.07.2021                                                                                                                              |
| (54) CURRENT LIMITING CONTROL                                | ORLOWSKI, Daniel, F.                                                     | (22) 28.12.2011                                                                                                                              |
| METHOD AND DEVICE FOR THREE-<br>LEVEL INVERTER               | (51) H02M 3/28                                                           | (54) Engagement of a spinning AC induction<br>motor                                                                                          |
| (73) Vertiv Tech Co., Ltd.                                   | H02M 3/335                                                               | (73) Hamilton Sundstrand Corporation                                                                                                         |
| (72) ZHOU, Yuan                                              | H02M 3/337                                                               | (72) Wrobel, James J.                                                                                                                        |
| HU, Huawei                                                   | H02M 1/42                                                                | Miles, Gary L.                                                                                                                               |
| PENG, Xiangbiao                                              | (11) EP2518879                                                           | (51) H02P 6/08                                                                                                                               |
| (31) 201711248722                                            | (21) EP12156236.7                                                        | (11) EP3607648                                                                                                                               |
| (32) 01.12.2017                                              | (47) 07.07.2021                                                          | (21) EP18727421.2                                                                                                                            |
| (33) China                                                   | (22) 20.02.2012                                                          | (47) 07.07.2021                                                                                                                              |
| (51) H02M 3/07                                               | (54) Alternating current to direct current power<br>conversion           | (87) IB2018052312                                                                                                                            |
| H02M 3/155                                                   | (73) General Electric Company                                            | 11.10.2018                                                                                                                                   |
| H02M 7/10                                                    | (72) Raju, Ravisekhar Nadimpalli                                         | (22) 04.04.2018                                                                                                                              |
| (11) EP2518876                                               | Garces, Luis Jose                                                        | (54) CONTROL SYSTEM FOR A VEHICLE                                                                                                            |
| (21) EP09852598.3                                            | Steigerwald, Robert Louis                                                | (73) TVS Motor Company Limited                                                                                                               |
| (47) 14.07.2021                                              | Schutten, Michael Joseph                                                 | (72) RAGHUNATH KUMAR RACHABATTUNI,<br>Venkata                                                                                                |
| (87) JP2009071706                                            | (31) 201113096005                                                        | JABEZ DHINAGAR, Samraj                                                                                                                       |
| 30.06.2011                                                   | (32) 28.04.2011                                                          | (31) 201741012185                                                                                                                            |
| (22) 26.12.2009                                              | (33) United States of America                                            | (32) 05.04.2017                                                                                                                              |
| (54) HIGH-VOLTAGE POWER SUPPLY                               | (51) H02M 5/275                                                          | (33) India                                                                                                                                   |
| (73) Canon Kabushiki Kaisha                                  | H02M 5/293                                                               | (51) H02P 6/08                                                                                                                               |
| (72) NAGASAKI Osamu                                          | H02M 5/297                                                               | H02P 21/06                                                                                                                                   |
| IIDA Masamichi                                               | (11) EP2017947                                                           | (11) EP3316474                                                                                                                               |
| (51) H02M 3/07                                               | (21) EP07742062.8                                                        | (21) EP17191818.8                                                                                                                            |
| H03F 1/02                                                    | (47) 14.07.2021                                                          | (47) 14.07.2021                                                                                                                              |
| H03F 1/30                                                    | (87) JP2007058627                                                        | (22) 19.09.2017                                                                                                                              |
| H02M 1/36                                                    | 08.11.2007                                                               | (54) MOTOR DRIVE CONTROL METHOD<br>AND SYSTEM, AND METHOD OF<br>CONTROLLING DRIVE OF AIR<br>COMPRESSOR IN FUEL CELL<br>SYSTEM USING THE SAME |
| (11) EP3579393                                               | (22) 20.04.2007                                                          | (73) Hyundai Motor Company                                                                                                                   |
| (21) EP18897875.3                                            | (54) MATRIX CONVERTER, AND CONTROL<br>METHOD FOR THE MATRIX<br>CONVERTER | Kia Motors Corporation                                                                                                                       |
| (47) 07.07.2021                                              | (73) Daikin Industries, Ltd.                                             | (72) Lee, Dong Hun                                                                                                                           |
| (87) CN2018082867                                            | (72) SAKAKIBARA, Kenichi                                                 | You, Chang Seok                                                                                                                              |
| 17.10.2019                                                   | (31) 2006125692                                                          | Kang, Min Su                                                                                                                                 |
| (22) 12.04.2018                                              | (32) 28.04.2006                                                          | Kim, Sung Do                                                                                                                                 |
| (54) CHARGE PUMP CIRCUIT AND<br>CONTROL METHOD THEREFOR      | (33) Japan                                                               | (31) 20160143494                                                                                                                             |
| (73) Shenzhen Goodix Technology Co., Ltd.                    | (51) H02M 7/00                                                           | (32) 31.10.2016                                                                                                                              |
| (72) WANG, Wen-Chi                                           | H05K 7/14                                                                | (33) Korea (Republic)                                                                                                                        |
| NG, Si Heng                                                  | H02M 7/48                                                                | (51) H02P 6/08                                                                                                                               |
| (51) H02M 3/158                                              | (11) EP3641122                                                           | H02P 25/024                                                                                                                                  |
| (11) EP3373434                                               | (21) EP17913973.8                                                        | H02P 29/024                                                                                                                                  |
| (21) EP18160591.6                                            | (47) 14.07.2021                                                          | (11) EP3499708                                                                                                                               |
| (47) 07.07.2021                                              | (87) JP2017022110                                                        | (21) EP17838964.9                                                                                                                            |
| (22) 07.03.2018                                              | 20.12.2018                                                               | (47) 07.07.2021                                                                                                                              |
| (54) DYNAMIC SLEW RATE CONTROL                               | (22) 15.06.2017                                                          | (87) JP2017011927                                                                                                                            |
| (73) MediaTek Inc.                                           | (54) POWER CONVERSION DEVICE                                             | 15.02.2018                                                                                                                                   |
| (72) CHU, Kuan-Yu                                            | (73) Nissan Motor Co., Ltd.                                              | (22) 24.03.2017                                                                                                                              |
| HUANG, HuaChiang                                             | (72) ABE, Keita                                                          | (54) MOTOR CONTROL DEVICE                                                                                                                    |
| LI, Chih-Chen                                                | (51) H02N 2/00                                                           |                                                                                                                                              |
| HONG, Shan-Fong                                              | H02N 2/02                                                                |                                                                                                                                              |
| (31) 201762467864 P                                          |                                                                          |                                                                                                                                              |
| 201815912396                                                 |                                                                          |                                                                                                                                              |

|                                         |                                     |                                     |
|-----------------------------------------|-------------------------------------|-------------------------------------|
| (73) Aisin Seiki Kabushiki Kaisha       | 21.09.2017                          | (54) METHOD FOR PHOTOVOLTAIC        |
| (72) HIDAKA Seiji                       | (22) 17.03.2017                     | MODULE FAULT DIAGNOSIS, EDGE        |
| SUGIMORI Kazuki                         | (54) CONTROL SYSTEM FOR ELECTRIC    | CALCULATION PROCESSING DEVICE,      |
| (31) 2016155683                         | MOTOR                               | AND INVERTER                        |
| (32) 08.08.2016                         | (73) ZF Automotive UK Limited       | (73) Sungrow Power Supply Co., Ltd. |
| (33) Japan                              | (72) DIXON, Christopher David       | (72) Zhao, Tian                     |
| (51) H02P 6/14                          | SCOTSON, Peter Geoffrey             | Yun, Ping                           |
| (11) EP3327922                          | (31) 201604663                      | Weng, Jie                           |
| (21) EP16201047.4                       | (32) 18.03.2016                     | (31) 201811582678                   |
| (47) 14.07.2021                         | (33) United Kingdom                 | (32) 24.12.2018                     |
| (22) 29.11.2016                         | (51) H02P 21/13                     | (33) China                          |
| (54) FAN CONTROL CIRCUIT                | H02P 21/18                          | (51) H02S 50/15                     |
| (73) Honeywell Technologies Sarl        | (11) EP3723273                      | (11) EP3599718                      |
| (72) Corti, Umberto                     | (21) EP19168686.4                   | (21) EP19188119.2                   |
| Rizzi, Giuseppe                         | (47) 07.07.2021                     | (47) 07.07.2021                     |
| (51) H02P 6/15                          | (22) 11.04.2019                     | (22) 24.07.2019                     |
| H02P 6/20                               | (54) METHOD FOR DETERMINING ROTOR   | (54) OPTICAL CHARACTERISATION OF    |
| (11) EP3413457                          | POSITION                            | THE ELECTRONIC TRANSPORT            |
| (21) EP17747562.1                       | (73) KEB Automation KG              | PROPERTIES OF A BIFACIAL            |
| (47) 07.07.2021                         | (72) Schöke, Achim                  | PHOTOVOLTAIC MODULE                 |
| (87) JP2017003990                       | (51) H02P 27/14                     | (73) Electricité de France          |
| 10.08.2017                              | H02M 7/487                          | (72) EL HAJJE, GILBERT              |
| (22) 03.02.2017                         | (11) EP3068037                      | (31) 1857049                        |
| (54) MOTOR DRIVE DEVICE AND MOTOR       | (21) EP16159736.4                   | (32) 27.07.2018                     |
| DRIVE METHOD                            | (47) 07.07.2021                     | (33) France                         |
| (73) Mitsuba Corporation                | (22) 10.03.2016                     | (51) H03D 3/00                      |
| (72) KOJIMA Naoki                       | (54) MOTOR DRIVING APPARATUS        | H04B 1/16                           |
| KOBAYASHI Tomofumi                      | (73) Samsung Electronics Co., Ltd.  | H04B 1/30                           |
| KAWASAKI Atsushi                        | Seoul National University R&DB      | H04L 27/14                          |
| (31) 2016020157                         | Foundation                          | (11) EP3579433                      |
| (32) 04.02.2016                         | (72) CHO, Je Hyung                  | (21) EP17894732.1                   |
| (33) Japan                              | SUL, Seung-Ki                       | (47) 14.07.2021                     |
| (51) H02P 7/285                         | CHOE, Se Hwa                        | (87) JP2017043261                   |
| H02P 29/024                             | SEO, Han Sol                        | 09.08.2018                          |
| (11) EP3217538                          | (31) 20150034740                    | (22) 01.12.2017                     |
| (21) EP17000337.0                       | (32) 13.03.2015                     | (54) RECEIVING APPARATUS, RECEIVING |
| (47) 07.07.2021                         | (33) Korea (Republic)               | METHOD, AND PROGRAM                 |
| (22) 06.03.2017                         | (51) H02S 20/23                     | (73) JVC Kenwood Corporation        |
| (54) METHOD AND DEVICE FOR TESTING      | H02S 20/25                          | (72) OKUHATA Yasuhide               |
| THE FUNCTION OF A CONTROL               | H02S 40/42                          | (31) 2017018466                     |
| CIRCUIT FOR A DC MOTOR                  | (11) EP2846459                      | (32) 03.02.2017                     |
| (73) Andreas Stihl AG & Co. KG          | (21) EP14183428.3                   | (33) Japan                          |
| (72) Gurr, Kay-Steffen                  | (47) 14.07.2021                     | (51) H03D 3/00                      |
| Liebhard, Gernot                        | (22) 03.09.2014                     | H04B 1/16                           |
| (31) 102016002740                       | (54) Improved roof covering element | H04B 1/30                           |
| (32) 07.03.2016                         | (73) Karsten, Jacob                 | H04L 27/227                         |
| (33) Germany                            | (72) Karsten, Jacob                 | (11) EP3114768                      |
| (51) H02P 9/00                          | (31) 2011377                        | (21) EP15703928.0                   |
| (11) EP3652853                          | (32) 04.09.2013                     | (47) 07.07.2021                     |
| (21) EP18727204.2                       | (33) Netherlands                    | (87) EP2015052060                   |
| (47) 07.07.2021                         | (51) H02S 50/00                     | 11.09.2015                          |
| (87) EP2018062857                       | (11) EP3648341                      | (22) 02.02.2015                     |
| 28.02.2019                              | (21) EP19201204.5                   | (54) DARC SIGNAL DEMODULATION       |
| (22) 17.05.2018                         | (47) 14.07.2021                     | CIRCUIT ARRANGEMENT AND             |
| (54) MONITORING A MULTI-WINDING SET     | (22) 02.10.2019                     | METHOD FOR OPERATING SAME           |
| STATOR                                  | (54) SOLAR INSTALLATION FOR HOMES   | (73) Robert Bosch GmbH              |
| (73) Siemens Gamesa Renewable Energy A/ | (73) Sagemcom Energy & Telecom SAS  | (72) NYENHUIS, Detlev               |
| S                                       | (72) BOUKHARI, Kévin                | (31) 102014204151                   |
| (72) FREIRE, Nuno Miguel Amaral         | (31) 1860052                        | (32) 06.03.2014                     |
| (31) 102017214670                       | (32) 30.10.2018                     | (33) Germany                        |
| (32) 22.08.2017                         | (33) France                         | (51) H03F 1/02                      |
| (33) Germany                            | (51) H02S 50/10                     | H04W 52/02                          |
| (51) H02P 21/05                         | (11) EP3675353                      | (11) EP3667905                      |
| (11) EP3430716                          | (21) EP19191443.1                   | (21) EP19201054.4                   |
| (21) EP17713407.9                       | (47) 07.07.2021                     | (47) 14.07.2021                     |
| (47) 14.07.2021                         | (22) 13.08.2019                     | (22) 31.01.2014                     |
| (87) GB2017050761                       |                                     |                                     |

|                                                                                                                               |                                                                                                                                   |                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| (54) IMPROVED EFFICIENCY FOR LINEAR AMPLIFIER OF ENVELOPE TRACKING MODULATOR                                                  | 489921                                                                                                                            | Levi, Michael                                                                                                  |
| (73) Snaptrack, Inc.                                                                                                          | (32) 12.01.2009                                                                                                                   | (51) H03K 5/131                                                                                                |
| (72) WIMPENNY, Gerard                                                                                                         | 04.02.2009                                                                                                                        | (11) EP3506503                                                                                                 |
| (31) 201301852                                                                                                                | 23.06.2009                                                                                                                        | (21) EP18214250.5                                                                                              |
| (32) 01.02.2013                                                                                                               | (33) United States of America                                                                                                     | (47) 14.07.2021                                                                                                |
| (33) United Kingdom                                                                                                           | United States of America                                                                                                          | (22) 19.12.2018                                                                                                |
| (51) H03F 3/00                                                                                                                | (51) H03H 9/02                                                                                                                    | (54) DIGITAL DELAY LOCKED LOOP                                                                                 |
| H03F 3/193                                                                                                                    | H03H 9/10                                                                                                                         | (73) Commissariat à l'Energie Atomique et aux Energies Alternatives                                            |
| H03F 3/217                                                                                                                    | H03H 9/17                                                                                                                         | (72) SUDALAIYANDI, Shanthi                                                                                     |
| H03F 3/30                                                                                                                     | H03H 9/56                                                                                                                         | MASSON, Gilles                                                                                                 |
| H03F 3/72                                                                                                                     | H03H 9/58                                                                                                                         | PELISSIER, Michaël                                                                                             |
| (11) EP3499718                                                                                                                | (11) EP2789099                                                                                                                    | ZARUDNIEV, Mykhailo                                                                                            |
| (21) EP17208089.7                                                                                                             | (21) EP12854657.9                                                                                                                 | (31) 1763220                                                                                                   |
| (47) 07.07.2021                                                                                                               | (47) 07.07.2021                                                                                                                   | (32) 26.12.2017                                                                                                |
| (22) 18.12.2017                                                                                                               | (87) KR2012006833                                                                                                                 | (33) France                                                                                                    |
| (54) IMPROVEMENTS IN OR RELATING TO SWITCHED-CAPACITOR POWER AMPLIFIERS                                                       | 13.06.2013                                                                                                                        | (51) H03K 7/02                                                                                                 |
| (73) Stichting IMEC Nederland                                                                                                 | (22) 27.08.2012                                                                                                                   | H04B 14/02                                                                                                     |
| (72) BECHTHUM, Elbert BA, Ao                                                                                                  | (54) BULK ACOUSTIC WAVE RESONATOR AND MANUFACTURING METHOD THEREOF, AND RADIO FREQUENCY DEVICE USING BULK ACOUSTIC WAVE RESONATOR | H04L 25/49                                                                                                     |
| (51) H03F 3/189                                                                                                               | (73) Samsung Electronics Co., Ltd.                                                                                                | H04L 27/02                                                                                                     |
| H03F 3/24                                                                                                                     | (72) SON, Sang Uk                                                                                                                 | H04L 27/04                                                                                                     |
| H04B 1/00                                                                                                                     | KIM, Duck Hwan                                                                                                                    | H04B 10/524                                                                                                    |
| H04B 1/04                                                                                                                     | KIM, Chul Soo                                                                                                                     | H04B 10/54                                                                                                     |
| (11) EP3642964                                                                                                                | PARK, Ho Soo                                                                                                                      | (11) EP3588883                                                                                                 |
| (21) EP18803355.9                                                                                                             | SONG, In Sang                                                                                                                     | (21) EP17901313.1                                                                                              |
| (47) 07.07.2021                                                                                                               | SHIN, Jea Shik                                                                                                                    | (47) 14.07.2021                                                                                                |
| (87) EP2018080300                                                                                                             | LEE, Moon Chul                                                                                                                    | (87) JP2017010703                                                                                              |
| 09.05.2019                                                                                                                    | CUI, Jing                                                                                                                         | 20.09.2018                                                                                                     |
| (22) 06.11.2018                                                                                                               | (31) 20110130902                                                                                                                  | (22) 16.03.2017                                                                                                |
| (54) METHOD AND DEVICES FOR AMPLIFYING RADIO SIGNALS BETWEEN A TERMINAL DEVICE AND AN ANTENNA                                 | (32) 08.12.2011                                                                                                                   | (54) SIGNAL SHAPING DEVICE, SHAPING TERMINATION DEVICE, SIGNAL SHAPING METHOD, AND OPTICAL TRANSMISSION METHOD |
| (73) MOLEX CVS DABENDORF GMBH                                                                                                 | (33) Korea (Republic)                                                                                                             | (73) Mitsubishi Electric Corporation                                                                           |
| (72) KAUTGE, Helmut                                                                                                           | (51) H03K 5/01                                                                                                                    | (72) BINKAI, Masashi                                                                                           |
| LEHMANN, Lars                                                                                                                 | H03K 5/12                                                                                                                         | YOSHIDA, Tsuyoshi                                                                                              |
| NAST, Helmut                                                                                                                  | H03K 5/1252                                                                                                                       | (51) H03K 17/00                                                                                                |
| (31) 102017219686                                                                                                             | H03K 19/003                                                                                                                       | (11) EP3403329                                                                                                 |
| (32) 06.11.2017                                                                                                               | H03K 19/0175                                                                                                                      | (21) EP16816168.5                                                                                              |
| (33) Germany                                                                                                                  | H03K 19/0185                                                                                                                      | (47) 14.07.2021                                                                                                |
| (51) H03H 7/01                                                                                                                | H03K 19/20                                                                                                                        | (87) CN2016082877                                                                                              |
| (11) EP2376183                                                                                                                | (11) EP3497787                                                                                                                    | 20.07.2017                                                                                                     |
| (21) EP10729671.7                                                                                                             | (21) EP18765348.0                                                                                                                 | (22) 20.05.2016                                                                                                |
| (47) 07.07.2021                                                                                                               | (47) 07.07.2021                                                                                                                   | (54) SELECTION CIRCUIT AND ELECTRONIC DEVICE                                                                   |
| (87) US2010020781                                                                                                             | (87) CN2018085399                                                                                                                 | (73) BOE Technology Group Co., Ltd.                                                                            |
| 15.07.2010                                                                                                                    | 18.04.2019                                                                                                                        | Beijing BOE Optoelectronics Technology Co., Ltd.                                                               |
| (22) 12.01.2010                                                                                                               | (22) 03.05.2018                                                                                                                   | (72) GUO, Lei                                                                                                  |
| (54) TUNED ENERGY BALANCED SYSTEM FOR MINIMIZING HEATING OF IMPLANTED LEADS IN A HIGH POWER ELECTROMAGNETIC FIELD ENVIRONMENT | (54) FEEDBACK-CONTROLLED CURRENT-SHAPED OUTPUT OF DIGITAL SIGNALS FOR REDUCING MAGNETIC COUPLING                                  | XU, Shuai                                                                                                      |
| (73) Greatbatch Ltd.                                                                                                          | (73) Shenzhen Goodix Technology Co., Ltd.                                                                                         | (31) 201610017951                                                                                              |
| (72) JOHNSON, Robert Shawn                                                                                                    | (72) ELWAN, Hassan                                                                                                                | (32) 12.01.2016                                                                                                |
| DABNEY, Warren S.                                                                                                             | (31) 201715782936                                                                                                                 | (33) China                                                                                                     |
| STEVENSON, Robert A.                                                                                                          | (32) 13.10.2017                                                                                                                   | (51) H03K 17/10                                                                                                |
| WILLIAMS, Christopher Michael                                                                                                 | (33) United States of America                                                                                                     | H03K 17/16                                                                                                     |
| MOSCHIANO, Holly Noelle                                                                                                       | (51) H03K 5/12                                                                                                                    | H03K 17/22                                                                                                     |
| BRAINARD, Scott                                                                                                               | H03K 19/003                                                                                                                       | (11) EP3545622                                                                                                 |
| KAISER, Daniel Robert                                                                                                         | (11) EP3386107                                                                                                                    | (21) EP17811650.5                                                                                              |
| HALPERIN, Henry R.                                                                                                            | (21) EP17305395.0                                                                                                                 | (47) 07.07.2021                                                                                                |
| LARDO, Albert, C.                                                                                                             | (47) 07.07.2021                                                                                                                   | (87) FR2017053206                                                                                              |
| (31) 144102 P                                                                                                                 | (22) 03.04.2017                                                                                                                   | 31.05.2018                                                                                                     |
| 149833 P                                                                                                                      | (54) DATA PROCESSING CIRCUITS                                                                                                     | (22) 22.11.2017                                                                                                |
|                                                                                                                               | (73) NXP B.V.                                                                                                                     | (54) POWER CIRCUIT SWITCHING DEVICE HAVING A PASSIVE PROTECTION CIRCUIT                                        |
|                                                                                                                               | (72) Daanen, Antonius Martinus Jacobus Lemaitre, Guillaume                                                                        | (73) Exagan                                                                                                    |
|                                                                                                                               | Leijenaar, William Gerard                                                                                                         | (72) GUILLOT, Laurent                                                                                          |
|                                                                                                                               |                                                                                                                                   | SUTTO, Thierry                                                                                                 |

|                                      |                                           |                                           |
|--------------------------------------|-------------------------------------------|-------------------------------------------|
| MOREAU, Eric                         | (47) 07.07.2021                           | (32) 31.05.2018                           |
| (31) 1661531                         | (22) 30.05.2019                           | (33) United States of America             |
| (32) 25.11.2016                      | (54) SEGMENTED RESISTIVE DIGITAL TO       | (51) H03M 1/46                            |
| (33) France                          | ANALOG CONVERTER                          | H03M 1/66                                 |
| (51) H03K 17/94                      | (73) NXP USA, Inc.                        | (11) EP3657682                            |
| H03K 17/955                          | (72) Zhang, Yizhong                       | (21) EP18306568.9                         |
| H03K 17/96                           | Pietri, Stefano                           | (47) 07.07.2021                           |
| (11) EP3736986                       | Feddeler, James Robert                    | (22) 26.11.2018                           |
| (21) EP20173545.3                    | Berens, Michael Todd                      | (54) DIGITAL TO ANALOG AND ANALOG TO      |
| (47) 14.07.2021                      | (31) 201810567631                         | DIGITAL CONVERTER                         |
| (22) 07.05.2020                      | (32) 04.06.2018                           | (73) NXP B.V.                             |
| (54) ILLUMINATED SWITCH              | (33) China                                | (72) Albinet, Xavier                      |
| (73) Captron Electronic GmbH         | (51) H03M 1/10                            | (51) H03M 3/00                            |
| (72) ROGGE, Christian                | H03M 1/16                                 | (11) EP3252953                            |
| GEBHARD, Roman                       | H03M 1/38                                 | (21) EP17173014.6                         |
| (31) 19173699                        | H03M 3/00                                 | (47) 07.07.2021                           |
| 19184642                             | (11) EP3188368                            | (22) 26.05.2017                           |
| (32) 10.05.2019                      | (21) EP16204137.0                         | (54) ANALOG-TO-DIGITAL CONVERTER          |
| 05.07.2019                           | (47) 07.07.2021                           | WITH EMBEDDED NOISE-SHAPED                |
| (33) European Patent Office (EPO)    | (22) 14.12.2016                           | TRUNCATION, EMBEDDED NOISE-               |
| European Patent Office (EPO)         | (54) DIGITAL MEASUREMENT OF               | SHAPED SEGMENTATION AND/OR                |
| (51) H03L 7/093                      | FEEDBACK DAC TIMING MISMATCH              | EMBEDDED EXCESS LOOP DELAY                |
| H03L 7/197                           | ERROR                                     | COMPENSATION                              |
| (11) EP3146632                       | (73) Analog Devices, Inc.                 | (73) MediaTek Inc.                        |
| (21) EP15724255.3                    | (72) Zhao, Jialin                         | (72) TSAI, Jen-Huan                       |
| (47) 07.07.2021                      | Meng, Qingdong                            | LOU, Chih-Hong                            |
| (87) EP2015061092                    | Dong, Yunzhi                              | (31) 201662345013 P                       |
| 26.11.2015                           | Silva, Jose Barreiro                      | 201715499872                              |
| (22) 20.05.2015                      | (31) 201562267368 P                       | (32) 03.06.2016                           |
| (54) DIGITAL PHASE LOCK LOOP CIRCUIT | 201615360349                              | 27.04.2017                                |
| INCLUDING FINITE IMPULSE             | (32) 15.12.2015                           | (33) United States of America             |
| RESPONSE FILTERING TO REDUCE         | 23.11.2016                                | United States of America                  |
| ALIASING OF QUANTIZATION NOISE       | (33) United States of America             | (51) H03M 13/03                           |
| (73) Robert Bosch GmbH               | United States of America                  | H03M 13/11                                |
| (72) BALACHANDRAN, Ganesh            | (51) H03M 1/12                            | H03M 13/25                                |
| PETKOV, Vladimir                     | (11) EP3082262                            | H03M 13/27                                |
| (31) 201414283816                    | (21) EP16164942.1                         | H03M 13/35                                |
| (32) 21.05.2014                      | (47) 07.07.2021                           | H04L 1/00                                 |
| (33) United States of America        | (22) 12.04.2016                           | H04L 27/34                                |
| (51) H03M 1/06                       | (54) METHOD AND SYSTEM FOR                | H04L 27/36                                |
| H03M 1/10                            | PERFORMING ANALOG-TO-DIGITAL              | (11) EP2924882                            |
| H03M 1/16                            | CONVERSION                                | (21) EP15163589.3                         |
| (11) EP2781028                       | (73) NXP B.V.                             | (47) 14.07.2021                           |
| (21) EP12850414.9                    | (72) Lin, Yu                              | (22) 25.11.2008                           |
| (47) 14.07.2021                      | Leong, Frank                              | (54) RECEPTION APPARATUS                  |
| (87) US2012054740                    | Doris, Konstantinos                       | COMPRISING MULTIPLEXER FOR                |
| 23.05.2013                           | (31) 201514685501                         | RATE 2/3 64K LDPC CODES AND               |
| (22) 12.09.2012                      | (32) 13.04.2015                           | 256QAM                                    |
| (54) CORRELATION-BASED BACKGROUND    | (33) United States of America             | (73) Saturn Licensing LLC                 |
| CALIBRATION FOR REDUCING INTER-      | (51) H03M 1/12                            | (72) Yokokawa, Takashi                    |
| STAGE GAIN ERROR AND NON-            | H03M 1/40                                 | Yamamoto, Makiko                          |
| LINEARITY IN PIPELINED ANALOG-TO-    | H03M 1/46                                 | Okada, Satoshi                            |
| DIGITAL CONVERTERS                   | (11) EP3607659                            | Ikegaya, Ryoji                            |
| (73) Analog Devices, Inc.            | (21) EP18806958.7                         | (31) 2007304689                           |
| (72) ALI, Ahmed Mohammed, Abdelatty  | (47) 07.07.2021                           | 2007304690                                |
| (31) 201161559388 P                  | (87) CN2018113159                         | 2008070467                                |
| 201213560226                         | 05.12.2019                                | PCT/JP2008/070960                         |
| (32) 14.11.2011                      | (22) 31.10.2018                           | (32) 26.11.2007                           |
| 27.07.2012                           | (54) SUCCESSIVE APPROXIMATION             | 26.11.2007                                |
| (33) United States of America        | REGISTER (SAR) ANALOG TO DIGITAL          | 18.03.2008                                |
| United States of America             | CONVERTER (ADC) DYNAMIC RANGE             | 18.11.2008                                |
| (51) H03M 1/06                       | EXTENSION                                 | (33) Japan                                |
| H03M 1/10                            | (73) Shenzhen Goodix Technology Co., Ltd. | Japan                                     |
| H03M 1/68                            | (72) Farid, Ali                           | Japan                                     |
| H03M 1/74                            | Emira, Ahmed                              | World Intellectual Property Office (WIPO) |
| H03M 1/80                            | Aboudina, Mohamed                         | (51) H03M 13/09                           |
| (11) EP3579420                       | Elwan, Hassan Osama                       | H03M 13/13                                |
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| (47) 07.07.2021                                                | (72) TAYLOR, Matthew Paul Athol           | (73) Harman International Industries, Incorporated                 |
| (87) CN2018086329                                              | ATUNGSIRI, Samuel Asanbeng                | (72) YANG, Zeng                                                    |
| 14.02.2019                                                     | WILSON, John Nicholas                     | ZHANG, Qingshan                                                    |
| (22) 10.05.2018                                                | (31) 0721269                              | ZHANG, Guoxia                                                      |
| (54) POLAR CODING METHODS AND DEVICES                          | 0722645                                   | (31) PCT/CN2013/082533                                             |
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| (72) HUANG, Lingchen                                           | (32) 30.10.2007                           | (33) World Intellectual Property Office (WIPO)                     |
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| QIAO, Yunfei                                                   | (33) United Kingdom                       | (21) EP19180521.7                                                  |
| LI, Rong                                                       | United Kingdom                            | (47) 14.07.2021                                                    |
| (31) 201710667569                                              | United Kingdom                            | (22) 17.06.2019                                                    |
| (32) 07.08.2017                                                | (51) H03M 13/27                           | (54) ACTIVE HEAT-DISSIPATION SYSTEM AND CONTROLLING METHOD THEREOF |
| (33) China                                                     | H04L 1/00                                 | (73) National Chung-Shan Institute of Science and Technology       |
| (51) H03M 13/09                                                | H04L 27/26                                | (72) Chen, Yen-Bin                                                 |
| H03M 13/13                                                     | (11) EP3582400                            | Shih, Sheng-Hsien                                                  |
| H04L 1/00                                                      | (21) EP19170314.9                         | Hsu, Shou-Jen                                                      |
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| (87) CN2018080392                                              | (73) Saturn Licensing LLC                 | (33) Taiwan, Province of China                                     |
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| (22) 24.03.2018                                                | ATUNGSIRI, Samuel Asanbeng                | H05K 7/20                                                          |
| (54) ENCODING METHOD AND DEVICE                                | WILSON, John Nicholas                     | (11) EP2845458                                                     |
| (73) Huawei Technologies Co., Ltd.                             | (31) 0721269                              | (21) EP12875876.0                                                  |
| (72) ZHANG, Huazi                                              | 0722645                                   | (47) 07.07.2021                                                    |
| LI, Rong                                                       | 0722728                                   | (87) CN2012075031                                                  |
| ZHOU, Yue                                                      | (32) 30.10.2007                           | 07.11.2013                                                         |
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| QIAO, Yunfei                                                   | (33) United Kingdom                       | (73) Telefonaktiebolaget LM Ericsson (publ)                        |
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| H03M 13/25                                                     | H04L 27/26                                | (21) EP17724808.5                                                  |
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| (21) EP14791585.4                                              | (73) Saturn Licensing LLC                 | (73) Telefonaktiebolaget LM Ericsson (publ)                        |
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| (87) JP2014061155                                              | ATUNGSIRI, Samuel Asanbeng                | ATHLEY, Fredrik                                                    |
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| (54) LDPC CODED MODULATION IN COMBINATION WITH 8PSK AND 16APSK | 0722645                                   | (51) H04B 1/04                                                     |
| (73) Sony Corporation                                          | 0722728                                   | H04W 52/04                                                         |
| (72) SHINOHARA Yuji                                            | (32) 30.10.2007                           | H04W 52/14                                                         |
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| MICHAEL Lachlan                                                | 20.11.2007                                | H04W 52/24                                                         |
| HIRAYAMA Yuichi                                                | (33) United Kingdom                       | H04W 52/36                                                         |
| YAMAMOTO Makiko                                                | United Kingdom                            | H04W 74/08                                                         |
| (31) 2013096995                                                | United Kingdom                            | H04W 84/18                                                         |
| (32) 02.05.2013                                                | (51) H03M 13/39                           | (11) EP3030011                                                     |
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| H04L 1/00                                                      | H04L 1/00                                 | (87) JP2014064470                                                  |
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| (11) EP3582401                                                 | (21) EP14839601.3                         |                                                                    |
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| (22) 30.05.2014                    | RADIO TRANSMISSION METHOD              | (33) United States of America   |
| (54) WIRELESS COMMUNICATION DEVICE | (73) Godo Kaisha IP Bridge 1           | (51) H04B 3/44                  |
| AND WIRELESS COMMUNICATION         | (72) NAKAO, Seigo                      | H04B 3/50                       |
| METHOD                             | IMAMURA, Daichi                        | H04B 3/54                       |
| (73) Sony Corporation              | OGAWA, Yoshihiko                       | H04B 5/00                       |
| (72) FUJITA, Chihiro               | MATSUMOTO, Atsushi                     | H04B 10/25                      |
| SAKODA, Kazuyuki                   | HIRAMATSU, Katsuhiko                   | H04B 1/40                       |
| WATANABE, Nobuhiko                 | (31) 2007211101                        | (11) EP3143702                  |
| IKENAGA, Yoshihiko                 | 2007280797                             | (21) EP15792511.6               |
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| H04W 24/08                         | H04L 27/20                             | WIRELESS JUMPER CONNECTIONS     |
| H04B 17/12                         | G01S 19/02                             | AND RELATED EQUIPMENT, SYSTEMS  |
| (11) EP3553959                     | (11) EP2993846                         | AND METHODS                     |
| (21) EP19162121.8                  | (21) EP14290353.3                      | (73) CommScope Technologies LLC |
| (47) 14.07.2021                    | (47) 14.07.2021                        | (72) MICHAELIS, Scott L.        |
| (22) 12.03.2019                    | (22) 26.11.2014                        | KURK, Morgan C.                 |
| (54) WIRELESS DEVICE               | (54) IMPROVEMENT OF SPREAD             | ALLEN, Trevor M.                |
| (73) NXP B.V.                      | SPECTRUM GMSK SIGNALS                  | VISWANATHAN, Venkatesh          |
| (72) KERSELAERS, Anthony           | (73) Airbus Defence and Space GmbH     | VELLA-COLEIRO, George P.        |
| GOMME, Liesbeth                    | (72) Floch, Jean-Jacques               | VACCARO, Ronald A.              |
| (31) 201815949231                  | Soualle, Francis                       | (31) 201461991689 P             |
| (32) 10.04.2018                    | Wendel, Jan                            | (32) 12.05.2014                 |
| (33) United States of America      | (31) 14003057                          | (33) United States of America   |
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| (47) 07.07.2021                    | H02H 3/28                              | (47) 14.07.2021                 |
| (87) CN2013075052                  | H04J 3/06                              | (22) 08.08.2018                 |
| 03.04.2014                         | (11) EP3355432                         | (54) METHOD AND SYSTEM FOR      |
| (22) 02.05.2013                    | (21) EP17152981.1                      | OPERATING A COMMUNICATIONS      |
| (54) SIGNAL PROCESSING METHOD,     | (47) 14.07.2021                        | DEVICE THAT COMMUNICATES VIA    |
| DEVICE AND SYSTEM                  | (22) 25.01.2017                        | INDUCTIVE COUPLING              |
| (73) Huawei Technologies Co., Ltd. | (54) METHOD FOR DETERMINING A TIME     | (73) NXP B.V.                   |
| (72) LIN, Huajiong                 | OFFSET BETWEEN MEASURED                | (72) HUEBER, Gernot             |
| HAN, Bo                            | VALUES                                 | MACNAMARA, Ian Thomas           |
| LV, Linjun                         | (73) Siemens Aktiengesellschaft        | DING, Jingfeng                  |
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| (33) China                         | Matussek, Robert                       | (33) United States of America   |
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| (54) LOAD-MODULATION DETECTION     | (22) 15.08.2016                        | (54) COMMUNICATION APPARATUS,   |
| COMPONENT                          | (54) CM INTERFERENCE DEGREE            | COMMUNICATION METHOD, AND       |
| (73) NXP B.V.                      | MEASUREMENT METHOD, DEVICE             | PROGRAM                         |
| (72) VAN DE BEEK, Remco            | AND SYSTEM                             | (73) Sony Corporation           |
| (51) H04B 1/707                    | (73) Huawei Technologies Co., Ltd.     | (72) Katsuyuki, Teruyama        |
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| H04J 1/00                          | H04M 11/06                             | (33) Japan                      |
| H04J 11/00                         | (11) EP3657768                         | (51) H04B 5/02                  |
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| H04L 1/16                          | (47) 07.07.2021                        | G07C 9/00                       |
| H04L 5/00                          | (22) 28.08.2014                        | (11) EP3069453                  |
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| (21) EP20182941.3                  | SYSTEMS                                | (47) 14.07.2021                 |
| (47) 07.07.2021                    | (73) Lantiq Beteiligungs-GmbH & Co. KG | (87) US2014065681               |
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|                                    | (31) 201361871850 P                    | (22) 14.11.2014                 |



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| (54) INTERNET-CONNECTED GARAGE DOOR CONTROL SYSTEM                                         | (54) ELECTRONIC APPARATUS AND METHOD IN WIRELESS COMMUNICATION SYSTEM                                                                                           | (51) H04B 7/06                                                |
| (73) Gentex Corporation                                                                    | (73) Sony Corporation                                                                                                                                           | H04B 7/08                                                     |
| (72) BAUER, Frederick T.                                                                   | (72) ZHAO, Youping                                                                                                                                              | H04B 7/022                                                    |
| TURNBULL, Robert R.                                                                        | ZHU, Dongzhi                                                                                                                                                    | (11) EP3682552                                                |
| IVATURI, Uma                                                                               | SUN, Chen                                                                                                                                                       | (21) EP18759220.9                                             |
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| (21) EP16917221.0                                                                          | H04B 7/08                                                                                                                                                       | (73) Qualcomm Incorporated                                    |
| (47) 07.07.2021                                                                            | (11) EP3545628                                                                                                                                                  | (72) LUO, Jianghong                                           |
| (87) CN2016100940                                                                          | (21) EP17788390.7                                                                                                                                               | ABEDINI, Navid                                                |
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| (22) 29.09.2016                                                                            | (87) US2017055593                                                                                                                                               | LI, Junyi                                                     |
| (54) SIGNAL TRANSMISSION METHOD AND APPARATUS                                              | 31.05.2018                                                                                                                                                      | SADIQ, Bilal                                                  |
| (73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.                                  | (22) 06.10.2017                                                                                                                                                 | ISLAM, Muhammad Nazmul                                        |
| (72) TANG, Hai                                                                             | (54) TECHNIQUES AND APPARATUSES FOR SWITCHING BETWEEN A SINGLE ANTENNA SUBARRAY OPERATION AND A MULTIPLE ANTENNA SUBARRAY OPERATION FOR DIFFERENT TRAFFIC TYPES | (31) 201762559519 P                                           |
| XU, Hua                                                                                    | (73) QUALCOMM Incorporated                                                                                                                                      | 201816056582                                                  |
| (51) H04B 7/06                                                                             | (72) LI, Junyi                                                                                                                                                  | (32) 16.09.2017                                               |
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| (21) EP18169687.3                                                                          | SUN, Jing                                                                                                                                                       | (33) United States of America                                 |
| (47) 07.07.2021                                                                            | ZHANG, Xiaoxia                                                                                                                                                  | United States of America                                      |
| (22) 21.02.2014                                                                            | (31) 201662425802 P                                                                                                                                             | (51) H04B 7/06                                                |
| (54) METHOD AND APPARATUS FOR FOCUSED DATA COMMUNICATIONS                                  | 201715647714                                                                                                                                                    | H04B 7/08                                                     |
| (73) Ossia, Inc.                                                                           | (32) 23.11.2016                                                                                                                                                 | H04B 7/0417                                                   |
| (72) ZEINE, Hatem I                                                                        | 12.07.2017                                                                                                                                                      | (11) EP3565138                                                |
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| (11) EP3340487                                                                             | (47) 07.07.2021                                                                                                                                                 | (73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.     |
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| (47) 14.07.2021                                                                            | 20.09.2018                                                                                                                                                      | (51) H04B 7/06                                                |
| (87) KR2016009261                                                                          | (22) 17.03.2017                                                                                                                                                 | H04B 7/08                                                     |
| 23.02.2017                                                                                 | (54) WIRELESS COMMUNICATION METHOD AND DEVICE                                                                                                                   | H04L 1/16                                                     |
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| (54) CHANNEL STATE INFORMATION FEEDBACK METHOD AND DEVICE IN WIRELESS COMMUNICATION SYSTEM | (72) ZHANG, Zhi                                                                                                                                                 | H04W 74/00                                                    |
| (73) Samsung Electronics Co., Ltd.                                                         | TANG, Hai                                                                                                                                                       | H04W 74/08                                                    |
| (72) CHOI, Seunghoon                                                                       | (51) H04B 7/06                                                                                                                                                  | (11) EP3668223                                                |
| KWAK, Youngwoo                                                                             | H04B 7/08                                                                                                                                                       | (21) EP18844381.6                                             |
| NOH, Hoondong                                                                              | (11) EP3618301                                                                                                                                                  | (47) 07.07.2021                                               |
| KIM, Donghan                                                                               | (21) EP19193986.7                                                                                                                                               | (87) CN2018099181                                             |
| OH, Jinyoung                                                                               | (47) 07.07.2021                                                                                                                                                 | 14.02.2019                                                    |
| KIM, Younsun                                                                               | (22) 28.08.2019                                                                                                                                                 | (22) 07.08.2018                                               |
| RO, Sangmin                                                                                | (54) METHOD AND ELECTRONIC DEVICE FOR FORMING BEAM IN WIRELESS COMMUNICATION SYSTEM                                                                             | (54) RANDOM ACCESS RESOURCE PROCESSING METHOD AND DEVICE      |
| JI, Hyoungju                                                                               | (73) Samsung Electronics Co., Ltd.                                                                                                                              | (73) Vivo Mobile Communication Co., Ltd.                      |
| BAE, Taehan                                                                                | (72) LEE, Hyoungjoo                                                                                                                                             | (72) CHEN, Li                                                 |
| SHIN, Cheolkyu                                                                             | KIM, Taeyoon                                                                                                                                                    | (31) 201710687886                                             |
| KIM, Youngbum                                                                              | YOO, Byungwook                                                                                                                                                  | (32) 11.08.2017                                               |
| (31) 201562207619 P                                                                        | LIM, Chaeman                                                                                                                                                    | (33) China                                                    |
| (32) 20.08.2015                                                                            | JUNG, Euichang                                                                                                                                                  | (51) H04B 7/06                                                |
| (33) United States of America                                                              | (31) 20180103969                                                                                                                                                | H04B 7/08                                                     |
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| (11) EP3373466                                                                             |                                                                                                                                                                 | (21) EP18182758.5                                             |
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| (54) METHOD AND APPARATUS FOR OPERATING CONTROL CHANNELS FOR BEAMFORMING-BASED WIRELESS COMMUNICATION | 201815913718                                                                                                     | (87) JP2014006286                                                                                                                         |
| (73) Samsung Electronics Co., Ltd.                                                                    | (32) 10.03.2017                                                                                                  | 06.08.2015                                                                                                                                |
| (72) SEOL, Ji-Yun                                                                                     | 10.03.2017                                                                                                       | (22) 17.12.2014                                                                                                                           |
| KIM, Tae-Young                                                                                        | 06.03.2018                                                                                                       | (54) SATELLITE COMMUNICATION SYSTEM, SATELLITE REPEATER, AND SATELLITE COMMUNICATION METHOD                                               |
| PARK, Jeong-Ho                                                                                        | (33) United States of America                                                                                    | (73) Mitsubishi Electric Corporation                                                                                                      |
| YU, Hyun-Kyu                                                                                          | United States of America                                                                                         | (72) TANI, Shigenori                                                                                                                      |
| JEONG, Su-Ryong                                                                                       | United States of America                                                                                         | MOTOYOSHI, Katsuyuki                                                                                                                      |
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| (33) Korea (Republic)                                                                                 | H04W 24/08                                                                                                       | (32) 28.01.2014                                                                                                                           |
| (51) H04B 7/06                                                                                        | H04W 72/04                                                                                                       | (33) Japan                                                                                                                                |
| H04B 7/08                                                                                             | H04B 17/17                                                                                                       | (51) H04B 7/06                                                                                                                            |
| H04L 5/00                                                                                             | H04B 7/0417                                                                                                      | H04B 7/26                                                                                                                                 |
| H04L 5/14                                                                                             | H04W 76/19                                                                                                       | H04L 1/00                                                                                                                                 |
| H04W 72/04                                                                                            | (11) EP3659390                                                                                                   | H04L 5/00                                                                                                                                 |
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| (47) 14.07.2021                                                                                       | (87) US2018044261                                                                                                | H04W 72/04                                                                                                                                |
| (87) KR2018013644                                                                                     | 31.01.2019                                                                                                       | H04W 72/08                                                                                                                                |
| 16.05.2019                                                                                            | (22) 28.07.2018                                                                                                  | (11) EP3567901                                                                                                                            |
| (22) 09.11.2018                                                                                       | (54) RADIO LINK FAILURE TIMERS AND CONSTANTS BASED ON RADIO LINK MANAGEMENT AND BEAM FAILURE RECOVERY PROCEDURES | (21) EP19183645.1                                                                                                                         |
| (54) METHOD FOR TRANSMITTING/RECEIVING DATA IN WIRELESS COMMUNICATION SYSTEM, AND APPARATUS THEREFOR  | (73) Qualcomm Incorporated                                                                                       | (47) 14.07.2021                                                                                                                           |
| (73) LG Electronics Inc.                                                                              | (72) NAGARAJA, Sumeeth                                                                                           | (22) 14.05.2014                                                                                                                           |
| (72) GO, Seongwon                                                                                     | LUO, Tao                                                                                                         | (54) CHANNEL STATE INFORMATION (CSI) MEASUREMENT AND REPORTING FOR ENHANCED INTERFERENCE MANAGEMENT FOR TRAFFIC ADAPTATION (EIMTA) IN LTE |
| KIM, Hyungtae                                                                                         | NAM, Wooseok                                                                                                     | (73) QUALCOMM Incorporated                                                                                                                |
| KANG, Jiwon                                                                                           | WANG, Xiao Feng                                                                                                  | (72) GAAL, Peter                                                                                                                          |
| (31) 201762584106 P                                                                                   | JOHN WILSON, Makesh Pravin                                                                                       | CHEN, Wanshi                                                                                                                              |
| 201762585532 P                                                                                        | CHAKRABORTY, Kaushik                                                                                             | (31) 201361824533 P                                                                                                                       |
| 201762587505 P                                                                                        | MONTOJO, Juan                                                                                                    | 201414275942                                                                                                                              |
| 201762590393 P                                                                                        | CHEN, Shengbo                                                                                                    | (32) 17.05.2013                                                                                                                           |
| (32) 09.11.2017                                                                                       | (31) 201762538603 P                                                                                              | 13.05.2014                                                                                                                                |
| 13.11.2017                                                                                            | 201816047842                                                                                                     | (33) United States of America                                                                                                             |
| 17.11.2017                                                                                            | (32) 28.07.2017                                                                                                  | United States of America                                                                                                                  |
| 24.11.2017                                                                                            | 27.07.2018                                                                                                       | (51) H04B 7/06                                                                                                                            |
| (33) United States of America                                                                         | (33) United States of America                                                                                    | H04J 11/00                                                                                                                                |
| United States of America                                                                              | United States of America                                                                                         | H04W 16/28                                                                                                                                |
| United States of America                                                                              | (51) H04B 7/06                                                                                                   | H04B 7/0408                                                                                                                               |
| United States of America                                                                              | H04B 7/08                                                                                                        | (11) EP3518572                                                                                                                            |
| (51) H04B 7/06                                                                                        | H04W 76/19                                                                                                       | (21) EP16917126.1                                                                                                                         |
| H04B 7/08                                                                                             | (11) EP3692768                                                                                                   | (47) 07.07.2021                                                                                                                           |
| H04L 5/00                                                                                             | (21) EP18793507.7                                                                                                | (87) CN2016100570                                                                                                                         |
| H04W 72/04                                                                                            | (47) 07.07.2021                                                                                                  | 05.04.2018                                                                                                                                |
| H04B 7/02                                                                                             | (87) US2018052454                                                                                                | (22) 28.09.2016                                                                                                                           |
| (11) EP3593478                                                                                        | 11.04.2019                                                                                                       | (54) SIGNAL TRANSMISSION METHOD, NETWORK DEVICE, AND TERMINAL DEVICE                                                                      |
| (21) EP18712390.6                                                                                     | (22) 24.09.2018                                                                                                  | (73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.                                                                                 |
| (47) 07.07.2021                                                                                       | (54) TECHNIQUES AND APPARATUSES FOR USING A SECOND LINK FOR BEAM FAILURE RECOVERY OF A FIRST LINK                | (72) TANG, Hai                                                                                                                            |
| (87) US2018021348                                                                                     | (73) QUALCOMM Incorporated                                                                                       | XU, Hua                                                                                                                                   |
| 13.09.2018                                                                                            | (72) ZHOU, Yan                                                                                                   | (51) H04B 7/06                                                                                                                            |
| (22) 07.03.2018                                                                                       | NAGARAJA, Sumeeth                                                                                                | H04L 5/00                                                                                                                                 |
| (54) NR UPLINK TRANSMIT BEAM SELECTION BASED ON PDCCH/PDSCH RECEIVE BEAMS                             | LUO, Tao                                                                                                         | (11) EP3490185                                                                                                                            |
| (73) QUALCOMM Incorporated                                                                            | (31) 201762569002 P                                                                                              | (21) EP17837232.2                                                                                                                         |
| (72) JOHN WILSON, Makesh Pravin                                                                       | 201816138545                                                                                                     | (47) 14.07.2021                                                                                                                           |
| LUO, Tao                                                                                              | (32) 06.10.2017                                                                                                  | (87) KR2017008322                                                                                                                         |
| WANG, Xiao Feng                                                                                       | 21.09.2018                                                                                                       | 08.02.2018                                                                                                                                |
| AKKARAKARAN, Sony                                                                                     | (33) United States of America                                                                                    | (22) 02.08.2017                                                                                                                           |
| NAGARAJA, Sumeeth                                                                                     | United States of America                                                                                         | (54) TECHNIQUES OF EFFICIENT DMRS AND DATA TRANSMISSION                                                                                   |
| CHEN, Shengbo                                                                                         | (51) H04B 7/06                                                                                                   |                                                                                                                                           |
| CHAKRABORTY, Kaushik                                                                                  | H04B 7/185                                                                                                       |                                                                                                                                           |
| (31) 201762469710 P                                                                                   | H04B 7/204                                                                                                       |                                                                                                                                           |
| 201762470188 P                                                                                        | (11) EP3101821                                                                                                   |                                                                                                                                           |
|                                                                                                       | (21) EP14880441.2                                                                                                |                                                                                                                                           |
|                                                                                                       | (47) 07.07.2021                                                                                                  |                                                                                                                                           |

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|-------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| AND RECEPTION IN WIRELESS COMMUNICATION SYSTEMS                                                                         | (47) 07.07.2021                                                                                                     | H04W 24/08                                                                                                                         |
| (73) LG Electronics Inc.                                                                                                | (87) US2018049407                                                                                                   | H04W 24/10                                                                                                                         |
| (72) KIM, Seonwook                                                                                                      | 20.06.2019                                                                                                          | H04W 36/00                                                                                                                         |
| YANG, Suckchel                                                                                                          | (22) 04.09.2018                                                                                                     | H04W 36/32                                                                                                                         |
| KIM, Kijun                                                                                                              | (54) CUSTOMIZING TRANSMISSION OF A SYSTEM INFORMATION MESSAGE                                                       | H04W 48/16                                                                                                                         |
| AHN, Joonkui                                                                                                            | (73) Google LLC                                                                                                     | H04B 7/02                                                                                                                          |
| CHAE, Hyukjin                                                                                                           | (72) WANG, Jibing                                                                                                   | (11) EP3542568                                                                                                                     |
| KIM, Youngtae                                                                                                           | STAUFFER, Erik Richard                                                                                              | (21) EP16921529.0                                                                                                                  |
| HWANG, Seunggye                                                                                                         | (31) 201762599500 P                                                                                                 | (47) 14.07.2021                                                                                                                    |
| LEE, Seungmin                                                                                                           | 201816105948                                                                                                        | (87) SE2016051125                                                                                                                  |
| HWANG, Daesung                                                                                                          | (32) 15.12.2017                                                                                                     | 24.05.2018                                                                                                                         |
| KWAK, Kyuhwan                                                                                                           | 20.08.2018                                                                                                          | (22) 15.11.2016                                                                                                                    |
| (31) 201662371241 P                                                                                                     | (33) United States of America                                                                                       | (54) WIRELESS DEVICE, RADIO NETWORK NODES, AND METHODS PERFORMED THEREIN FOR HANDLING MOBILITY IN A WIRELESS COMMUNICATION NETWORK |
| 201762443777 P                                                                                                          | United States of America                                                                                            | (73) Telefonaktiebolaget LM Ericsson (PUBL)                                                                                        |
| 201762501068 P                                                                                                          | (51) H04B 7/06                                                                                                      | (72) RAMACHANDRA, Pradeepa                                                                                                         |
| (32) 05.08.2016                                                                                                         | H04L 5/00                                                                                                           | AMIRIJOO, Mehdi                                                                                                                    |
| 08.01.2017                                                                                                              | H04W 16/28                                                                                                          | AXELSSON, Håkan                                                                                                                    |
| 03.05.2017                                                                                                              | H04W 72/04                                                                                                          | AXÉN, Rasmus                                                                                                                       |
| (33) United States of America                                                                                           | (11) EP3448105                                                                                                      |                                                                                                                                    |
| United States of America                                                                                                | (21) EP18187058.5                                                                                                   |                                                                                                                                    |
| United States of America                                                                                                | (47) 14.07.2021                                                                                                     |                                                                                                                                    |
| (51) H04B 7/06                                                                                                          | (22) 11.08.2014                                                                                                     | (51) H04B 7/06                                                                                                                     |
| H04L 5/00                                                                                                               | (54) COMMUNICATION CONTROL DEVICE, COMMUNICATION CONTROL METHOD, TERMINAL DEVICE, AND INFORMATION PROCESSING DEVICE | H04W 36/00                                                                                                                         |
| H04L 5/14                                                                                                               | (73) Sony Corporation                                                                                               | H04W 36/24                                                                                                                         |
| H04W 74/08                                                                                                              | (72) Mizusawa, Nishiki                                                                                              | H04W 36/30                                                                                                                         |
| (11) EP3659383                                                                                                          | (31) 2013197005                                                                                                     | H04W 48/12                                                                                                                         |
| (21) EP18892028.4                                                                                                       | (32) 24.09.2013                                                                                                     | H04W 72/08                                                                                                                         |
| (47) 14.07.2021                                                                                                         | (33) Japan                                                                                                          | H04W 74/00                                                                                                                         |
| (87) KR2018016489                                                                                                       | (51) H04B 7/06                                                                                                      | H04W 74/02                                                                                                                         |
| 27.06.2019                                                                                                              | H04L 5/00                                                                                                           | H04B 7/04                                                                                                                          |
| (22) 21.12.2018                                                                                                         | H04W 72/14                                                                                                          | (11) EP3625990                                                                                                                     |
| (54) METHODS, TERMINAL AND BASE STATION FOR HANDLING A BANDWIDTH PART INACTIVITY TIMER IN WIRELESS COMMUNICATION SYSTEM | H04W 74/08                                                                                                          | (21) EP18859542.5                                                                                                                  |
| (73) Samsung Electronics Co., Ltd.                                                                                      | H04B 7/0408                                                                                                         | (47) 07.07.2021                                                                                                                    |
| (72) AGIWAL, Anil                                                                                                       | (11) EP3494659                                                                                                      | (87) CN2018105594                                                                                                                  |
| (31) 201762608911 P                                                                                                     | (21) EP16779150.8                                                                                                   | 28.03.2019                                                                                                                         |
| (32) 21.12.2017                                                                                                         | (47) 14.07.2021                                                                                                     | (22) 13.09.2018                                                                                                                    |
| (33) United States of America                                                                                           | (87) EP2016074509                                                                                                   | (54) RESOURCE SELECTION METHOD, DEVICE AND COMPUTER STORAGE MEDIUM                                                                 |
| (51) H04B 7/06                                                                                                          | 19.04.2018                                                                                                          | (73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.                                                                          |
| H04L 5/00                                                                                                               | (22) 12.10.2016                                                                                                     | (72) ISOKANGAS, Jari Jaakko                                                                                                        |
| H04L 25/00                                                                                                              | (54) BEAM BASED RANDOM ACCESS                                                                                       | YANG, Ning                                                                                                                         |
| H04L 27/26                                                                                                              | (73) Huawei Technologies Co., Ltd.                                                                                  | (31) 201762561497 P                                                                                                                |
| H04W 52/14                                                                                                              | (72) KELA, Petteri                                                                                                  | (32) 21.09.2017                                                                                                                    |
| H04W 52/32                                                                                                              | COSTA, Mario                                                                                                        | (33) United States of America                                                                                                      |
| H04W 72/04                                                                                                              | (51) H04B 7/06                                                                                                      | (51) H04B 7/06                                                                                                                     |
| H04B 7/0404                                                                                                             | H04W 16/10                                                                                                          | H04W 74/08                                                                                                                         |
| (11) EP3627923                                                                                                          | H04W 28/18                                                                                                          | (11) EP3280213                                                                                                                     |
| (21) EP17919988.0                                                                                                       | H04W 36/00                                                                                                          | (21) EP16207087.4                                                                                                                  |
| (47) 07.07.2021                                                                                                         | H04W 72/04                                                                                                          | (47) 07.07.2021                                                                                                                    |
| (87) CN2017095259                                                                                                       | H04W 72/12                                                                                                          | (22) 28.12.2016                                                                                                                    |
| 07.02.2019                                                                                                              | H04W 74/00                                                                                                          | (54) INTERNET OF THINGS DEVICE RANDOM ACCESS METHOD AND SYSTEM BASED ON MASSIVE MIMO TECHNOLOGY                                    |
| (22) 31.07.2017                                                                                                         | (11) EP3357174                                                                                                      | (73) Shanghai Research Center For Wireless Communications                                                                          |
| (54) DATA TRANSMISSION METHOD AND TERMINAL DEVICE                                                                       | (21) EP15779040.3                                                                                                   | (72) Yi, Huiyue                                                                                                                    |
| (73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.                                                               | (47) 14.07.2021                                                                                                     | Wang, Jiang                                                                                                                        |
| (72) CHEN, Wenhong                                                                                                      | (87) SE2015051024                                                                                                   | Xu, Jing                                                                                                                           |
| (51) H04B 7/06                                                                                                          | 06.04.2017                                                                                                          | Yang, Yang                                                                                                                         |
| H04L 5/00                                                                                                               | (22) 29.09.2015                                                                                                     | (31) 201610624544                                                                                                                  |
| H04W 4/08                                                                                                               | (54) METHODS AND DEVICES FOR DETERMINING SUITABLE TRANSMIT DIRECTIONS FOR BEAMFORMED TRANSMISSION                   | (32) 01.08.2016                                                                                                                    |
| H04W 48/12                                                                                                              | (73) Telefonaktiebolaget LM Ericsson (publ)                                                                         | (33) China                                                                                                                         |
| H04W 52/02                                                                                                              | (72) WIGREN, Torbjörn                                                                                               | (51) H04B 7/08                                                                                                                     |
| (11) EP3718235                                                                                                          | MAURITZ, Oskar                                                                                                      | H04W 16/28                                                                                                                         |
| (21) EP18773055.1                                                                                                       | (51) H04B 7/06                                                                                                      |                                                                                                                                    |

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|-----------------------------------|------------------------------------|------------------------------------|
| H04W 56/00                        | (54) GROUND BASED ANTENNA          | (87) KR2017011083                  |
| H04W 72/04                        | BEAMFORMING FOR                    | 05.04.2018                         |
| H04W 72/12                        | COMMUNICATIONS BETWEEN             | (22) 29.09.2017                    |
| H04B 7/0404                       | ACCESS NODES AND USERS             | (54) METHOD AND APPARATUS FOR      |
| H04B 7/0408                       | TERMINALS LINKED BY A RELAY        | TRANSMITTING UPLINK CONTROL        |
| (11) EP3687234                    | SUCH AS A SATELLITE                | SIGNAL IN WIRELESS CELLULAR        |
| (21) EP20163158.7                 | (73) ViaSat Inc.                   | COMMUNICATION SYSTEM               |
| (47) 14.07.2021                   | (72) MILLER, Mark                  | (73) Samsung Electronics Co., Ltd. |
| (22) 01.05.2015                   | BUER, Kenneth                      | (72) YEO, Jeongho                  |
| (54) METHOD AND APPARATUS FOR     | CRONIN, Christopher                | OH, Jinyoung                       |
| ORIENTATION BASED BEAM            | (31) 201562145810 P                | PARK, Sungjin                      |
| SELECTION                         | 201562145804 P                     | NOH, Hoondong                      |
| (73) QUALCOMM Incorporated        | 201562164456 P                     | KIM, Taehyoung                     |
| (72) EL AYACH, Omar               | 201662278368 P                     | KWAK, Yongjun                      |
| SUBRAMANIAN, Sundar               | 201662298911 P                     | KIM, Younsun                       |
| SMEE, John Edward                 | 201662312342 P                     | KWAK, Youngwoo                     |
| SAMPATH, Ashwin                   | 201662314921 P                     | KIM, Donghan                       |
| Li, Junyi                         | (32) 10.04.2015                    | KIM, Youngbum                      |
| (31) 201414289435                 | 10.04.2015                         | SHIN, Cheolkyu                     |
| (32) 28.05.2014                   | 20.05.2015                         | CHOI, Seunghoon                    |
| (33) United States of America     | 13.01.2016                         | GHA, Heedon                        |
| (51) H04B 7/155                   | 23.02.2016                         | BAE, Taehan                        |
| H04B 7/26                         | 23.03.2016                         | (31) 20160125836                   |
| (11) EP3075081                    | 29.03.2016                         | 20170037077                        |
| (21) EP14808545.9                 | (33) United States of America      | 20170055468                        |
| (47) 07.07.2021                   | United States of America           | 20170092416                        |
| (87) EP2014075493                 | United States of America           | 20170101929                        |
| 04.06.2015                        | United States of America           | (32) 29.09.2016                    |
| (22) 25.11.2014                   | United States of America           | 23.03.2017                         |
| (54) VEHICLE COMMUNICATION SYSTEM | United States of America           | 28.04.2017                         |
| AND RELATED METHOD                | United States of America           | 21.07.2017                         |
| (73) Bayerische Motoren Werke     | (51) H04B 7/185                    | 10.08.2017                         |
| Aktiengesellschaft                | H04W 56/00                         | (33) Korea (Republic)              |
| (72) FIKAR, Stefan                | (11) EP3407508                     | Korea (Republic)                   |
| KAINDL, Markus                    | (21) EP16901288.7                  | Korea (Republic)                   |
| KHAN, Sajjad                      | (47) 07.07.2021                    | Korea (Republic)                   |
| (31) 102013224514                 | (87) CN2016081862                  | Korea (Republic)                   |
| (32) 29.11.2013                   | 16.11.2017                         | (51) H04B 7/26                     |
| (33) Germany                      | (22) 12.05.2016                    | H04L 5/00                          |
| (51) H04B 7/185                   | (54) SYNCHRONISATION METHOD,       | H04W 28/00                         |
| H04B 7/204                        | TERMINAL AND NETWORK DEVICE        | H04W 72/00                         |
| H04W 40/18                        | (73) GUANGDONG OPPO MOBILE         | H04W 72/04                         |
| H04W 40/20                        | TELECOMMUNICATIONS CORP., LTD.     | H04W 84/04                         |
| H04W 40/24                        | (72) TANG, Hai                     | H04W 88/04                         |
| H04L 12/755                       | (51) H04B 7/26                     | (11) EP3554156                     |
| H04W 4/029                        | H04J 11/00                         | (21) EP19176543.7                  |
| (11) EP3520449                    | H04L 12/26                         | (47) 14.07.2021                    |
| (21) EP17781286.4                 | H04W 72/04                         | (22) 11.03.2010                    |
| (47) 14.07.2021                   | H04B 17/309                        | (54) RELAY LINK CONTROL CHANNEL    |
| (87) US2017053505                 | (11) EP3197073                     | DESIGN                             |
| 05.04.2018                        | (21) EP14905670.7                  | (73) BlackBerry Limited            |
| (22) 26.09.2017                   | (47) 14.07.2021                    | (72) YU, Yi                        |
| (54) ROUTING BY MOBILE NETWORK    | (87) CN2014091159                  | CAI, Zhijun                        |
| NODES                             | 19.05.2016                         | WOMACK, James Earl                 |
| (73) Hughes Network Systems, LLC  | (22) 14.11.2014                    | (31) 160156 P                      |
| (72) TORRES, Robert               | (54) TRANSMISSION CONTROL METHODS, | 16015809 P                         |
| CHOQUETTE, George, Joseph         | BASE STATION AND TERMINAL          | 16016309 P                         |
| EAGLING, Trevor, Alan             | (73) Huawei Technologies Co., Ltd. | (32) 13.03.2009                    |
| (31) 201615281042                 | (72) WEN, Fan                      | 13.03.2009                         |
| (32) 29.09.2016                   | YUAN, Lanjie                       | 13.03.2009                         |
| (33) United States of America     | HUANG, Huang                       | (33) United States of America      |
| (51) H04B 7/185                   | (51) H04B 7/26                     | United States of America           |
| H04B 7/204                        | H04L 1/18                          | United States of America           |
| H04W 56/00                        | H04L 5/00                          | (51) H04B 7/26                     |
| (11) EP3651377                    | H04B 7/02                          | H04L 12/26                         |
| (21) EP19202088.1                 | (11) EP3506709                     | H04W 52/24                         |
| (47) 07.07.2021                   | (21) EP17856862.2                  | H04W 52/34                         |
| (22) 08.04.2016                   | (47) 07.07.2021                    | H04W 52/36                         |

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|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| H04W 72/04                                                                                                              | (11) EP3764565                                                                                                          | (54) ERROR DETECTION UNIT, SATELLITE RECEIVER AND METHOD                                                                                             |
| H04W 88/02                                                                                                              | (21) EP20194704.1                                                                                                       | (73) Vestel Elektronik Sanayi ve Ticaret A.S.                                                                                                        |
| H04W 88/08                                                                                                              | (47) 07.07.2021                                                                                                         | (72) YILMAZLAR, Ismail                                                                                                                               |
| H04W 88/12                                                                                                              | (22) 08.01.2009                                                                                                         | (51) H04H 20/30                                                                                                                                      |
| (11) EP3764565                                                                                                          | (54) METHOD AND APPARATUS FOR TRANSMITTING INFORMATION ABOUT AVAILABLE POWER OF TERMINAL IN MOBILE COMMUNICATION SYSTEM | H03M 13/25                                                                                                                                           |
| (21) EP20194704.1                                                                                                       | (73) Samsung Electronics Co., Ltd.                                                                                      | H04L 1/00                                                                                                                                            |
| (47) 07.07.2021                                                                                                         | (72) Kim, Soeng-Hun                                                                                                     | H04L 1/04                                                                                                                                            |
| (22) 08.01.2009                                                                                                         | Van Lieshout, Gert Jan                                                                                                  | H04L 1/08                                                                                                                                            |
| (54) METHOD AND APPARATUS FOR TRANSMITTING INFORMATION ABOUT AVAILABLE POWER OF TERMINAL IN MOBILE COMMUNICATION SYSTEM | Jeong, Kyeong-In                                                                                                        | H04L 5/00                                                                                                                                            |
| (73) Samsung Electronics Co., Ltd.                                                                                      | Heo, Youn-Hyoung                                                                                                        | (11) EP2974102                                                                                                                                       |
| (72) Kim, Soeng-Hun                                                                                                     | (31) 20080003669                                                                                                        | (21) EP14723548.5                                                                                                                                    |
| Van Lieshout, Gert Jan                                                                                                  | 20080060513                                                                                                             | (47) 14.07.2021                                                                                                                                      |
| Jeong, Kyeong-In                                                                                                        | (32) 11.01.2008                                                                                                         | (87) US2014026135                                                                                                                                    |
| Heo, Youn-Hyoung                                                                                                        | 25.06.2008                                                                                                              | 25.09.2014                                                                                                                                           |
| (31) 20080003669                                                                                                        | (33) Korea (Republic)                                                                                                   | (22) 13.03.2014                                                                                                                                      |
| 20080060513                                                                                                             | Korea (Republic)                                                                                                        | (54) METHOD AND APPARATUS FOR TRANSMISSION AND RECEPTION OF IN-BAND ON-CHANNEL RADIO SIGNALS INCLUDING COMPLEMENTARY LOW DENSITY PARITY CHECK CODING |
| (32) 11.01.2008                                                                                                         | (51) H04B 7/26                                                                                                          | (73) Ibiqity Digital Corporation                                                                                                                     |
| 25.06.2008                                                                                                              | H04W 8/00                                                                                                               | (72) KROEGER, Brian W.                                                                                                                               |
| (33) Korea (Republic)                                                                                                   | H04W 88/04                                                                                                              | PEYLA, Paul J.                                                                                                                                       |
| Korea (Republic)                                                                                                        | (11) EP3278624                                                                                                          | (31) 201313835011                                                                                                                                    |
| (51) H04B 7/26                                                                                                          | (21) EP16716997.8                                                                                                       | (32) 15.03.2013                                                                                                                                      |
| H04W 8/00                                                                                                               | (47) 14.07.2021                                                                                                         | (33) United States of America                                                                                                                        |
| H04W 88/04                                                                                                              | (87) US2016024342                                                                                                       | (51) H04H 20/63                                                                                                                                      |
| (11) EP3278624                                                                                                          | 06.10.2016                                                                                                              | H04H 40/90                                                                                                                                           |
| (21) EP16716997.8                                                                                                       | (22) 25.03.2016                                                                                                         | H03D 7/16                                                                                                                                            |
| (47) 14.07.2021                                                                                                         | (54) SYSTEMS, METHODS, AND APPARATUS FOR MANAGING A RELAY CONNECTION IN A WIRELESS COMMUNICATIONS NETWORK               | H03D 7/18                                                                                                                                            |
| (87) US2016024342                                                                                                       | (73) Qualcomm Incorporated                                                                                              | H04B 1/18                                                                                                                                            |
| 06.10.2016                                                                                                              | (72) GULATI, Kapil                                                                                                      | H04B 1/28                                                                                                                                            |
| (22) 25.03.2016                                                                                                         | TAVILDAR, Saurabha Rangrao                                                                                              | H04N 7/20                                                                                                                                            |
| (54) SYSTEMS, METHODS, AND APPARATUS FOR MANAGING A RELAY CONNECTION IN A WIRELESS COMMUNICATIONS NETWORK               | BAGHEL, Sudhir Kumar                                                                                                    | (11) EP3379728                                                                                                                                       |
| (73) Qualcomm Incorporated                                                                                              | PATIL, Shailesh                                                                                                         | (21) EP17161921.6                                                                                                                                    |
| (72) GULATI, Kapil                                                                                                      | VANDERVEEN, Michaela                                                                                                    | (47) 14.07.2021                                                                                                                                      |
| TAVILDAR, Saurabha Rangrao                                                                                              | SADIQ, Bilal                                                                                                            | (22) 20.03.2017                                                                                                                                      |
| BAGHEL, Sudhir Kumar                                                                                                    | CHENG, Hong                                                                                                             | (54) SIGNAL RECEIVER                                                                                                                                 |
| PATIL, Shailesh                                                                                                         | ZISIMOPOULOS, Haris                                                                                                     | (73) Rafael Microelectronics, Inc.                                                                                                                   |
| VANDERVEEN, Michaela                                                                                                    | (31) 201562141064 P                                                                                                     | (72) Kan, Meng-Ping                                                                                                                                  |
| SADIQ, Bilal                                                                                                            | 201615080462                                                                                                            | Hsieh, Chun-An                                                                                                                                       |
| CHENG, Hong                                                                                                             | (32) 31.03.2015                                                                                                         | (51) H04H 40/90                                                                                                                                      |
| ZISIMOPOULOS, Haris                                                                                                     | 24.03.2016                                                                                                              | H04B 1/28                                                                                                                                            |
| (31) 201562141064 P                                                                                                     | (33) United States of America                                                                                           | H04N 7/20                                                                                                                                            |
| 201615080462                                                                                                            | United States of America                                                                                                | H04B 10/2575                                                                                                                                         |
| (32) 31.03.2015                                                                                                         | (51) H04B 7/26                                                                                                          | (11) EP3337062                                                                                                                                       |
| 24.03.2016                                                                                                              | H04W 56/00                                                                                                              | (21) EP16206967.8                                                                                                                                    |
| (33) United States of America                                                                                           | (11) EP2992715                                                                                                          | (47) 14.07.2021                                                                                                                                      |
| United States of America                                                                                                | (21) EP13883776.0                                                                                                       | (22) 27.12.2016                                                                                                                                      |
| (51) H04B 7/26                                                                                                          | (47) 14.07.2021                                                                                                         | (54) A METHOD AND AN APPARATUS FOR TRANSMITTING A PLURALITY OF RECEIVED SATELLITE AND DIGITAL TERRESTRIAL TELEVISION SIGNALS THROUGH A FIBER NETWORK |
| H04W 56/00                                                                                                              | (87) CN2013075125                                                                                                       | (73) UAB "Terra"                                                                                                                                     |
| (11) EP2992715                                                                                                          | 06.11.2014                                                                                                              | (72) SKOROBOGATOV, Genadij                                                                                                                           |
| (21) EP13883776.0                                                                                                       | (22) 03.05.2013                                                                                                         | (31) 2016533                                                                                                                                         |
| (47) 14.07.2021                                                                                                         | (54) TRANSMITTING A SYNCHRONIZATION INDICATION                                                                          | (32) 13.12.2016                                                                                                                                      |
| (87) CN2013075125                                                                                                       | (73) BlackBerry Limited                                                                                                 | (33) Lithuania                                                                                                                                       |
| 06.11.2014                                                                                                              | (72) ZHU, Yajun                                                                                                         | (51) H04H 60/04                                                                                                                                      |
| (22) 03.05.2013                                                                                                         | CAI, Zhijun                                                                                                             | G06F 3/01                                                                                                                                            |
| (54) TRANSMITTING A SYNCHRONIZATION INDICATION                                                                          | XU, Hua                                                                                                                 | G10H 1/40                                                                                                                                            |
| (73) BlackBerry Limited                                                                                                 | GAO, Shiwei                                                                                                             | G11B 27/00                                                                                                                                           |
| (72) ZHU, Yajun                                                                                                         | (51) H04B 10/11                                                                                                         | G06F 3/0354                                                                                                                                          |
| CAI, Zhijun                                                                                                             | H04B 10/112                                                                                                             | G06F 3/0362                                                                                                                                          |
| XU, Hua                                                                                                                 |                                                                                                                         | (11) EP3617848                                                                                                                                       |
| GAO, Shiwei                                                                                                             |                                                                                                                         |                                                                                                                                                      |
| (51) H04B 10/11                                                                                                         |                                                                                                                         |                                                                                                                                                      |
| H04B 10/112                                                                                                             |                                                                                                                         |                                                                                                                                                      |

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| (21) EP18192087.7                                                                                                                    | (31) 201261732851 P                                                     | (47) 07.07.2021                                                             |
| (47) 14.07.2021                                                                                                                      | (32) 03.12.2012                                                         | (87) CN2018085740                                                           |
| (22) 31.08.2018                                                                                                                      | (33) United States of America                                           | 08.11.2018                                                                  |
| (54) HAPTIC FEEDBACK MUSIC DEVICE<br>COMPRISING ROTATING USER<br>INTERFACE ELEMENT                                                   | (51) H04J 11/00                                                         | (22) 04.05.2018                                                             |
| (73) Native Instruments GmbH                                                                                                         | H04L 1/00                                                               | (54) RECEIVING METHOD FOR<br>SYNCHRONIZATION SIGNAL, AND<br>RELATED DEVICES |
| (72) SPEITH, David                                                                                                                   | H04L 1/20                                                               | (73) Huawei Technologies Co., Ltd.                                          |
| (51) H04J 1/00                                                                                                                       | H04L 5/00                                                               | (72) QU, Bingyu                                                             |
| H04L 5/00                                                                                                                            | (11) EP3573261                                                          | LIU, Jianqin                                                                |
| H04W 88/08                                                                                                                           | (21) EP19167909.1                                                       | (31) 201710309975                                                           |
| H04B 7/022                                                                                                                           | (47) 07.07.2021                                                         | (32) 04.05.2017                                                             |
| H04B 7/0452                                                                                                                          | (22) 20.11.2003                                                         | (33) China                                                                  |
| (11) EP3207646                                                                                                                       | (54) RADIO COMMUNICATION APPARATUS<br>AND RADIO COMMUNICATION<br>METHOD | (51) H04J 13/18                                                             |
| (21) EP15851446.3                                                                                                                    | (73) Optis Wireless Technology, LLC                                     | H04J 11/00                                                                  |
| (47) 14.07.2021                                                                                                                      | (72) NISHIO, Akihiko                                                    | H04L 5/00                                                                   |
| (87) US2015051408                                                                                                                    | HIRAMATSU, Katsuhiko                                                    | H04L 27/26                                                                  |
| 21.04.2016                                                                                                                           | (31) 2002378076                                                         | H04W 28/06                                                                  |
| (22) 22.09.2015                                                                                                                      | (32) 26.12.2002                                                         | H04W 72/04                                                                  |
| (54) SIMULTANEOUS COMMUNICATION<br>WITH MULTIPLE WIRELESS<br>COMMUNICATION DEVICES                                                   | (33) Japan                                                              | (11) EP3512134                                                              |
| (73) Cisco Technology, Inc.                                                                                                          | (51) H04J 11/00                                                         | (21) EP19154994.8                                                           |
| (72) LYONS, Daniel Joseph                                                                                                            | H04L 5/00                                                               | (47) 07.07.2021                                                             |
| (31) 201462065357 P                                                                                                                  | H04L 27/26                                                              | (22) 21.12.2015                                                             |
| 201562174707 P                                                                                                                       | (11) EP2523373                                                          | (54) COMMUNICATION DEVICE AND<br>COMMUNICATION METHOD                       |
| (32) 17.10.2014                                                                                                                      | (21) EP10842055.5                                                       | (73) Panasonic Intellectual Property<br>Corporation of America              |
| 12.06.2015                                                                                                                           | (47) 14.07.2021                                                         | (72) YAMAMOTO, Tetsuya                                                      |
| (33) United States of America                                                                                                        | (87) JP2010007241                                                       | HOSHINO, Masayuki                                                           |
| United States of America                                                                                                             | 14.07.2011                                                              | NAKAO, Seigo                                                                |
| (51) H04J 3/06                                                                                                                       | (22) 13.12.2010                                                         | (31) 2015022168                                                             |
| H04J 3/14                                                                                                                            | (54) OFDM TRANSMITTER DEVICE AND<br>OFDM TRANSMISSION METHOD            | (32) 06.02.2015                                                             |
| H04L 12/24                                                                                                                           | (73) Sun Patent Trust                                                   | (33) Japan                                                                  |
| (11) EP3022856                                                                                                                       | (72) MATSUMURA, Yoshinobu                                               | (51) H04J 13/18                                                             |
| (21) EP14758813.1                                                                                                                    | KIMURA, Tomohiro                                                        | H04L 5/00                                                                   |
| (47) 14.07.2021                                                                                                                      | OUCHI, Mikihiro                                                         | H04L 27/26                                                                  |
| (87) EP2014067768                                                                                                                    | (31) 2010002634                                                         | (11) EP3443699                                                              |
| 19.03.2015                                                                                                                           | (32) 08.01.2010                                                         | (21) EP16766100.8                                                           |
| (22) 20.08.2014                                                                                                                      | (33) Japan                                                              | (47) 14.07.2021                                                             |
| (54) METHOD FOR LOCALIZATION OF<br>A FREQUENCY DEVIATION IN A<br>COMMUNICATION NETWORK AND<br>CORRESPONDING COMMUNICATION<br>NETWORK | (51) H04J 11/00                                                         | (87) SE2016050802                                                           |
| (73) Siemens Aktiengesellschaft                                                                                                      | H04L 29/06                                                              | 19.10.2017                                                                  |
| (72) BUHL, Michael Bernhard                                                                                                          | H04W 36/30                                                              | (22) 25.08.2016                                                             |
| OBRADOVIC, Dragan                                                                                                                    | H04W 40/00                                                              | (54) COMMON PHASE ERROR<br>COMPENSATION                                     |
| STEINDL, Günter                                                                                                                      | H04W 52/02                                                              | (73) Telefonaktiebolaget LM Ericsson (PUBL)                                 |
| WOLFRUM, Philipp                                                                                                                     | H04W 68/02                                                              | (72) HESSLER, Martin                                                        |
| (31) 102013218328                                                                                                                    | H04W 72/04                                                              | LINDBOM, Lars                                                               |
| (32) 12.09.2013                                                                                                                      | H04W 88/12                                                              | FURUSKOG, Johan                                                             |
| (33) Germany                                                                                                                         | H04W 88/16                                                              | (31) 201662321369 P                                                         |
| (51) H04J 11/00                                                                                                                      | H04W 4/70                                                               | (32) 12.04.2016                                                             |
| (11) EP2926484                                                                                                                       | H04W 76/27                                                              | (33) United States of America                                               |
| (21) EP13860099.4                                                                                                                    | H04W 76/28                                                              | (51) H04J 14/02                                                             |
| (47) 14.07.2021                                                                                                                      | (11) EP3582580                                                          | (11) EP3747142                                                              |
| (87) US2013072872                                                                                                                    | (21) EP19188132.5                                                       | (21) EP20723645.6                                                           |
| 12.06.2014                                                                                                                           | (47) 07.07.2021                                                         | (47) 07.07.2021                                                             |
| (22) 03.12.2013                                                                                                                      | (22) 10.09.2014                                                         | (87) US2020027124                                                           |
| (54) INFORMATION SIGNALLING FOR<br>NETWORK ASSISTED INTERFERENCE<br>MITIGATION                                                       | (54) COMMUNICATIONS DEVICE AND<br>METHOD                                | 15.10.2020                                                                  |
| (73) Apple Inc.                                                                                                                      | (73) SONY Corporation                                                   | (22) 08.04.2020                                                             |
| (72) DAVYDOV, Alexei                                                                                                                 | (72) MARTIN, Brian Alexander                                            | (54) BUNDLING CAPACITY CHANGES IN<br>CHANNEL HOLDER BASED OPTICAL<br>LINKS  |
| HAN, Seunghye                                                                                                                        | WAKABAYASHI, Hideji                                                     | (73) Ciena Corporation                                                      |
| MOROZOV, Gregory                                                                                                                     | KAHTAVA, Jussi                                                          | (72) AL SAYEED, Choudhury A.                                                |
| MALTSEV, Alexander                                                                                                                   | MORIOKA, Yuichi                                                         | BOWNASS, David C.                                                           |
| BOLOTIN, Ilya                                                                                                                        | (31) 13186547                                                           | XU, Yanping                                                                 |
|                                                                                                                                      | (32) 27.09.2013                                                         | (31) 201916378830                                                           |
|                                                                                                                                      | (33) European Patent Office (EPO)                                       | (32) 09.04.2019                                                             |
|                                                                                                                                      | (51) H04J 13/00                                                         | (33) United States of America                                               |
|                                                                                                                                      | H04J 11/00                                                              |                                                                             |
|                                                                                                                                      | (11) EP3611853                                                          |                                                                             |
|                                                                                                                                      | (21) EP18793833.7                                                       |                                                                             |

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| (51) H04J 14/06<br>H04L 9/08<br>H04B 10/50<br>H04B 10/60<br>H04B 10/70                                                                                                                                                                                                                                                            | Oh, Eun-Mi<br>(31) 20060118563<br>(32) 28.11.2006<br>(33) Korea (Republic)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | H04L 1/16<br>H04L 1/18<br>H04L 29/08<br>H04W 28/06                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| (11) EP3629496<br>(21) EP18821585.9<br>(47) 14.07.2021<br>(87) CN2018090544<br>27.12.2018<br>(22) 11.06.2018<br>(54) DATA TRANSMISSION METHOD,<br>DEVICE, AND SYSTEM<br>(73) Huawei Technologies Co., Ltd.<br>(72) LI, Zhengyu<br>SU, Changzheng<br>LU, Liangliang<br>(31) 201710467962<br>(32) 20.06.2017<br>(33) China          | (51) H04L 1/00<br>H04L 1/08<br>H04W 48/10<br>H04W 92/10<br>H04W 76/14<br>(11) EP3251413<br>(21) EP16702594.9<br>(47) 07.07.2021<br>(87) JP2016000140<br>04.08.2016<br>(22) 13.01.2016<br>(54) CONFIGURATION OF COVERAGE<br>ENHANCEMENT SCHEMES<br>INVOLVING TRANSPORT<br>BLOCK SIZES AND NUMBER OF<br>REPETITIONS OF SIB<br>(73) NEC Corporation<br>(72) CHEN, Yuhua<br>AWAD, Yassin Aden<br>ARNOTT, Robert<br>(31) 201501618<br>(32) 30.01.2015<br>(33) United Kingdom                                                                                                                                                                                                                                                                                                                                                                                     | (11) EP3643109<br>(21) EP18740934.7<br>(47) 14.07.2021<br>(87) US2018037331<br>27.12.2018<br>(22) 13.06.2018<br>(54) LARGE MEDIA ACCESS CONTROL<br>SERVICE DATA UNIT (MSDU)<br>DELIVERY<br>(73) Qualcomm Incorporated<br>(72) TRAININ, Solomon<br>EITAN, Alecsander Petru<br>(31) 201762524399 P<br>201816006349<br>(32) 23.06.2017<br>12.06.2018<br>(33) United States of America<br>United States of America                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| (51) H04L 1/00<br>(11) EP3554162<br>(21) EP17890353.0<br>(47) 07.07.2021<br>(87) CN2017070326<br>12.07.2018<br>(22) 05.01.2017<br>(54) DATA TRANSMISSION METHOD AND<br>COMMUNICATION DEVICE<br>(73) GUANGDONG OPPO MOBILE<br>TELECOMMUNICATIONS CORP., LTD.<br>(72) TANG, Hai<br>XU, Hua                                          | (51) H04L 1/00<br>H04L 1/16<br>H04L 1/18<br>(11) EP3493444<br>(21) EP18215624.0<br>(47) 14.07.2021<br>(22) 17.01.2013<br>(54) METHOD AND APPARATUS FOR<br>RECEIVING UPLINK CONTROL<br>INFORMATION IN WIRELESS<br>COMMUNICATION SYSTEM<br>(73) LG Electronics Inc.<br>(72) SEO, Dong Youn<br>AHN, Joon Kui<br>YANG, Suck Chel<br>YI, Yun Jung<br>(31) 201261587626 P<br>201261594386 P<br>201261645614 P<br>201261646245 P<br>201261650986 P<br>201261679064 P<br>201261706095 P<br>201261706766 P<br>(32) 17.01.2012<br>03.02.2012<br>10.05.2012<br>11.05.2012<br>23.05.2012<br>02.08.2012<br>26.09.2012<br>28.09.2012<br>(33) United States of America<br>United States of America<br>United States of America<br>United States of America<br>United States of America<br>United States of America<br>United States of America<br>United States of America | (51) H04L 1/00<br>H04L 1/16<br>H04L 1/20<br>H04W 52/24<br>H04B 17/336<br>(11) EP3453126<br>(21) EP16725617.1<br>(47) 07.07.2021<br>(87) SE2016050406<br>09.11.2017<br>(22) 04.05.2016<br>(54) ESTIMATION OF PARAMETERS USED<br>FOR DETERMINING A SIGNAL-TO-<br>INTERFERENCE MEASURE AT A<br>WIRELESS COMMUNICATION DEVICE<br>(73) Telefonaktiebolaget LM Ericsson (PUBL)<br>(72) SANDBERG, David<br>CHRISTENSSON, Anders<br>NORDSTRÖM, Björn<br>PERSSON, Magnus                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| (51) H04L 1/00<br>G10L 19/005<br>G10L 19/07<br>(11) EP2450885<br>(21) EP12153285.7<br>(47) 07.07.2021<br>(22) 13.11.2007<br>(54) Decoding method and apparatus using<br>a regression analysis method for frame<br>error concealment<br>(73) Samsung Electronics Co., Ltd.<br>(72) Sung, Ho-Sang<br>Lee, Kang-Eun<br>Kim, Jung-Hoe | (51) H04L 1/00<br>H04L 1/18<br>H04L 5/00<br>H04W 72/04<br>(11) EP3457600                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | (51) H04L 1/00<br>H04L 1/18<br>H04L 29/08<br>H04W 28/06<br>(11) EP3643109<br>(21) EP18740934.7<br>(47) 14.07.2021<br>(87) US2018037331<br>27.12.2018<br>(22) 13.06.2018<br>(54) LARGE MEDIA ACCESS CONTROL<br>SERVICE DATA UNIT (MSDU)<br>DELIVERY<br>(73) Qualcomm Incorporated<br>(72) TRAININ, Solomon<br>EITAN, Alecsander Petru<br>(31) 201762524399 P<br>201816006349<br>(32) 23.06.2017<br>12.06.2018<br>(33) United States of America<br>United States of America<br>(51) H04L 1/00<br>H04L 1/16<br>H04L 1/20<br>H04W 52/24<br>H04B 17/336<br>(11) EP3453126<br>(21) EP16725617.1<br>(47) 07.07.2021<br>(87) SE2016050406<br>09.11.2017<br>(22) 04.05.2016<br>(54) ESTIMATION OF PARAMETERS USED<br>FOR DETERMINING A SIGNAL-TO-<br>INTERFERENCE MEASURE AT A<br>WIRELESS COMMUNICATION DEVICE<br>(73) Telefonaktiebolaget LM Ericsson (PUBL)<br>(72) SANDBERG, David<br>CHRISTENSSON, Anders<br>NORDSTRÖM, Björn<br>PERSSON, Magnus<br>(51) H04L 1/00<br>H04L 1/18<br>(11) EP3639421<br>(21) EP18733462.8<br>(47) 14.07.2021<br>(87) US2018035669<br>20.12.2018<br>(22) 01.06.2018<br>(54) DOWNLINK CONTROL INFORMATION<br>(DCI) FORMAT FOR CODE BLOCK<br>GROUP (CBG) BASED SUBSEQUENT<br>TRANSMISSION<br>(73) QUALCOMM Incorporated<br>(72) GUPTA, Piyush<br>SUN, Jing<br>(31) 201762521278 P<br>201815994535<br>(32) 16.06.2017<br>31.05.2018<br>(33) United States of America<br>United States of America<br>(51) H04L 1/00<br>H04L 1/18<br>H04L 5/00<br>H04W 72/04<br>(11) EP3457600 |

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| (21) EP16917125.3                           | H04W 72/08                          | (47) 14.07.2021                             |
| (47) 07.07.2021                             | H04W 84/18                          | (87) CN2013083949                           |
| (87) CN2016100568                           | H04W 84/20                          | 27.03.2014                                  |
| 05.04.2018                                  | (11) EP3598700                      | (22) 22.09.2013                             |
| (22) 28.09.2016                             | (21) EP19195963.4                   | (54) METHOD AND DEVICE FOR                  |
| (54) DATA TRANSMISSION METHOD,              | (47) 07.07.2021                     | DETECTING CONTROL SIGNAL AND                |
| CHANNEL ESTIMATION METHOD, AND              | (22) 03.02.2016                     | CONTROLLING SIGNAL DETECTION                |
| APPARATUS                                   | (54) A METHOD AND SYSTEM FOR        | (73) ZTE Corporation                        |
| (73) GUANGDONG OPPO MOBILE                  | SELECTING AND DISTRIBUTING          | (72) CHEN, Yijian                           |
| TELECOMMUNICATIONS CORP., LTD.              | COMMUNICATION PARAMETERS IN A       | DAI, Bo                                     |
| (72) TANG, Hai                              | WIRELESS NETWORK                    | ZUO, Zhisong                                |
| (51) H04L 1/00                              | (73) LumenRadio AB                  | SHI, Jing                                   |
| H04L 1/18                                   | (72) PAAPE, Lars Fabian             | (31) 201210358430                           |
| H04W 40/16                                  | BENGTSSON, Marcus                   | (32) 24.09.2012                             |
| (11) EP3320720                              | NORLÉN, Niclas                      | (33) China                                  |
| (21) EP15903796.9                           | KARLSSON, Michael                   | (51) H04L 1/00                              |
| (47) 07.07.2021                             | (31) 1550116                        | H04L 5/00                                   |
| (87) CN2015089542                           | (32) 04.02.2015                     | H04W 72/00                                  |
| 23.03.2017                                  | (33) Sweden                         | (11) EP3611857                              |
| (22) 14.09.2015                             | (51) H04L 1/00                      | (21) EP18794777.5                           |
| (54) CONTENTION WINDOW SIZE                 | H04L 5/00                           | (47) 14.07.2021                             |
| ADJUSTMENT IN A WIRELESS                    | H04L 25/14                          | (87) KR2018005108                           |
| COMMUNICATION SYSTEM                        | H04L 27/26                          | 08.11.2018                                  |
| (73) Lenovo Innovations Limited (Hong Kong) | (11) EP3231145                      | (22) 02.05.2018                             |
| (72) LEI, Haipeng                           | (21) EP15807870.9                   | (54) METHOD BY WHICH TERMINAL               |
| SHEN, Zukang                                | (47) 07.07.2021                     | BLIND-DECODES PHYSICAL SIDELINK             |
| YU, Xiaodong                                | (87) EP2015079025                   | CONTROL CHANNEL (PSCCH)                     |
| (51) H04L 1/00                              | 16.06.2016                          | IN WIRELESS COMMUNICATION                   |
| H04L 5/00                                   | (22) 08.12.2015                     | SYSTEM, AND TERMINAL USING                  |
| (11) EP3295598                              | (54) TRANSMITTER AND RECEIVER USING | SAME                                        |
| (21) EP16728419.9                           | CHANNEL BUNDLING                    | (73) LG Electronics Inc.                    |
| (47) 07.07.2021                             | (73) Sony Corporation               | (72) LEE, Seungmin                          |
| (87) SE2016050436                           | (72) ZOELLNER, Jan                  | SEO, Hanbyul                                |
| 24.11.2016                                  | STADELMEIER, Lothar                 | KIM, Myoungseob                             |
| (22) 13.05.2016                             | LOGHIN, Nabil                       | (31) 201762500492 P                         |
| (54) UPLINK CONTROL INFORMATION FOR         | SCHNEIDER, Daniel                   | (32) 02.05.2017                             |
| MULTIPLE DIFFERENT DOWNLINK                 | (31) 14197731                       | (33) United States of America               |
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 Capar, Cagatay  
 Kilinc, Caner

Larsson, Christina  
 Tidestav, Claes  
 Shi, Cong  
 Hui, Dennis  
 Sundman, Dennis  
 Kang, Du Ho  
 Ramos, Edgar  
 Karipidis, Eleftherios  
 Myhre, Elena  
 Semaan, Eliane  
 Ringh, Emil  
 Wittenmark, Emma  
 Dahlman, Erik  
 Eriksson, Erik  
 Athley, Fredrik  
 Gunnarsson, Fredrik  
 Harrysson, Fredrik  
 Lindqvist, Fredrik  
 Fodor, Gabor  
 Li, Gen  
 Klang, Göran N.  
 Bark, Gunnar  
 Mildh, Gunnar  
 Wang, Hai  
 Axelsson, Håkan  
 Björkegren, Håkan  
 Asplund, Henrik  
 Sahlin, Henrik  
 Tullberg, Hugo  
 da Silva Icaro, L. J.  
 Aktas, Ismet  
 Maric, Ivana  
 Berg, Jan-Erik  
 Peisa, Janne  
 Vikberg, Jari  
 Wang, Jianfeng  
 Liu, Jinhua  
 Sachs, Joachim  
 Axmon, Joakim  
 Huschke, Jörg  
 Axnäs, Johan  
 Furuskog, Johan  
 Rune, Johan  
 Sköld, Johan  
 Torsner, Johan  
 Fridén, Jonas  
 Fröberg Olsson, Jonas  
 Kronander, Jonas  
 Medbo, Jonas  
 Pradas Jose, Luis  
 Ansari, Junaid  
 Norrman, Karl  
 Werner, Karl  
 Wang Helmersson, Ke  
 Hiltunen, Kimmo  
 Balachandran, Kumar  
 Lindbom, Lars  
 Manholm, Lars  
 Sundström, Lars  
 Stattin, Magnus  
 Ericson, Mårten  
 Hessler, Martin  
 Johansson, Martin  
 Coldrey, Mikael  
 Fallgren, Mikael  
 Prytz, Mikael  
 Tercero Vargas, Miurel Isabel  
 Brahmi, Nadia

Wiberg, Niclas  
 Jaldén, Niklas  
 Johansson, Niklas  
 Seifi, Nima  
 He, Ning  
 Queseth, Olav  
 Osman Nuri Can, Yilmaz  
 Frenger, Pål  
 Karlsson, Patrik  
 Rugeland, Patrik  
 Alriksson, Peter  
 von Wrycza, Peter  
 Wallentin, Pontus  
 Ramachandra, Pradeepa  
 Lu, Qianxi  
 Miao, Qingyu  
 Moosavi, Reza  
 Abrahamsson, Richard  
 Baldemair, Robert  
 Lindgren, Robert  
 Fan, Rui  
 Sharma, Sachin  
 Landström, Sara  
 Ashraf Shehzad, Ali  
 Tombaz, Sibel  
 Järmyr, Simon  
 Hong, Songnam  
 Parkvall, Stefan  
 Wager, Stefan  
 Jacobsson, Sven  
 Petersson, Sven  
 Rimhagen, Thomas  
 Waldeen, Thomas  
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 Irnich, Tim  
 Palenius, Torgny  
 Gustavsson, Ulf  
 Engström, Ulrika  
 Saxena, Vedit  
 Garcia, Virgile  
 Müller, Walter  
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 (73) Huawei Technologies Co., Ltd.  
 (72) WANG, Ting  
 LI, Yuanjie

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| H04W 72/08                               | 201715826612                                | (54) COMMUNICATION METHOD AND               |
| H04W 76/12                               | (32) 31.01.2017                             | APPARATUS                                   |
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| (47) 07.07.2021                          | AND METHOD AND APPARATUS FOR                | (87) SE2015050501                           |
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| (22) 14.12.2015                          | (72) YAN, Zhiyu                             | (54) INSERTING AND EXTRACTING               |
| (54) METHOD AND DEVICE FOR               | LYU, Yongxia                                | CONTROL DATA USING FREQUENCY                |
| RESOURCE MANAGEMENT IN AN                | (31) 201710454090                           | COMPONENTS                                  |
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| (72) GOU, Wei                            | (51) H04L 5/00                              | BERG, Miguel                                |
| BI, Feng                                 | H04L 27/26                                  | CHEN, Tsao-Tsen                             |
| ZHAO, Yajun                              | H04B 7/04                                   | TROJER, Elmar                               |
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| METHOD FOR SIDEBAND                      | (32) 12.08.2016                             | (72) CHIODINI, Alain                        |
| INFORMATION, SENDING TERMINAL            | 13.10.2016                                  | WIDEMONT, Laurent                           |
| AND RECEIVING TERMINAL                   | (33) China                                  | (31) 1756955                                |
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| (72) SHEN, Xiaodong                      | (51) H04L 5/00                              | (33) France                                 |
| SUN, Xiaodong                            | H04L 27/26                                  | (51) H04L 5/00                              |
| DING, Yu                                 | H04W 36/00                                  | H04L 29/08                                  |
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| 09.08.2018                               | (72) Reial, Andres                          | INDICATION                                  |
| (22) 30.11.2017                          | Cedergren, Andreas                          | (73) GUANGDONG OPPO MOBILE                  |
| (54) MATRIX-BASED TECHNIQUES FOR         | Tidestav, Claes                             | TELECOMMUNICATIONS CORP., LTD.              |
| MAPPING RESOURCE ELEMENTS TO             | (51) H04L 5/00                              | (72) TANG, Hai                              |
| PORTS FOR REFERENCE SIGNALS              | H04L 27/26                                  | (51) H04L 5/00                              |
| (73) QUALCOMM Incorporated               | H04W 52/14                                  | H04W 8/00                                   |
| (72) CEZANNE, Juergen                    | H04W 52/32                                  | H04W 72/12                                  |
| RAGHAVAN, Vasanthan                      | (11) EP3624506                              | H04W 92/16                                  |
| SADIQ, Bilal                             | (21) EP19800843.5                           | H04W 92/18                                  |
| SUBRAMANIAN, Sundar                      | (47) 07.07.2021                             | (11) EP3487103                              |
| SAMPATH, Ashwin                          | (87) CN2019085601                           | (21) EP16912277.7                           |

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| (87) CN2016094713                  | LI, Hong                                    | (32) 12.05.2014                             |
| 15.02.2018                         | JIN, Yinghao                                | 12.05.2014                                  |
| (22) 11.08.2016                    | TAN, Wei                                    | 19.05.2014                                  |
| (54) SCHEDULING ASSIGNMENT         | (31) 201610877936                           | 09.01.2015                                  |
| INFORMATION TRANSMISSION           | (32) 30.09.2016                             | (33) United States of America               |
| METHOD, DEVICE, AND SYSTEM         | (33) China                                  | United States of America                    |
| (73) Huawei Technologies Co., Ltd. | (51) H04L 5/00                              | United States of America                    |
| (72) LU, Zhenwei                   | H04W 52/02                                  | United States of America                    |
| LIU, Deping                        | H04W 72/04                                  | (51) H04L 5/00                              |
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| (87) CN2017118703                  | GROUP DESIGN FOR IMPROVED                   | (54) DISTINGUISHING REFERENCE               |
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| (22) 26.12.2017                    | SYSTEMS, AND NETWORKS                       | COMMUNICATION SYSTEM                        |
| (54) METHOD FOR ACTIVATING AND     | (73) QUALCOMM Incorporated                  | (73) Telefonaktiebolaget LM Ericsson (publ) |
| DEACTIVATING SECONDARY CELL,       | (72) SUN, Jing                              | (72) DA SILVA, Icaro                        |
| AND TERMINAL DEVICE                | CHEN, Wanshi                                | RAMACHANDRA, Pradeepa                       |
| (73) GUANGDONG OPPO MOBILE         | YANG, Yang                                  | MOOSAVI, Reza                               |
| TELECOMMUNICATIONS CORP., LTD.     | LEE, Heechoon                               | (31) 201662377505 P                         |
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| (47) 14.07.2021                    | H04B 7/02                                   | COMMUNICATION WITH REDUCED                  |
| (87) KR2016004761                  | (11) EP3593579                              | OVERHEAD SIGNALING                          |
| 17.11.2016                         | (21) EP17710181.3                           | (73) Sharp Kabushiki Kaisha                 |
| (22) 04.05.2016                    | (47) 14.07.2021                             | FG Innovation Company Limited               |
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| TRANSMITTING/RECEIVING DATA        | 13.09.2018                                  | YAMADA, Shohei                              |
| USING TRANSPORT BLOCK SIZE         | (22) 08.03.2017                             | YOKOMAKURA, Kazunari                        |
| DEFINED FOR MACHINE TYPE           | (54) POWER AMPLIFIER-AWARE USER             | TAKAHASHI, Hiroki                           |
| COMMUNICATION TERMINAL IN          | SCHEDULING                                  | AIBA, Tatsushi                              |
| WIRELESS ACCESS SYSTEM             | (73) Telefonaktiebolaget LM Ericsson (publ) | (31) 2016139176                             |
| SUPPORTING MACHINE TYPE            | (72) GUSTAVSSON, Ulf                        | (32) 14.07.2016                             |
| COMMUNICATION                      | MOLLÉN, Christopher                         | (33) Japan                                  |
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| (72) KIM, Bonghoe                  | (51) H04L 5/00                              | H04W 72/04                                  |
| YI, Yunjung                        | H04W 56/00                                  | (11) EP3493621                              |
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| H04W 76/15                         | (54) HANDLING OF CELLS ASSOCIATED           | METHOD AND INTEGRATED CIRCUIT               |
| H04W 76/28                         | WITH TIMING ADVANCE GROUPS                  | (73) Sharp Kabushiki Kaisha                 |
| (11) EP3512253                     | IN A WIRELESS COMMUNICATIONS                | FG INNOVATION COMPANY LIMITED               |
| (21) EP17854622.2                  | SYSTEM                                      | (72) YOKOMAKURA Kazunari                    |
| (47) 14.07.2021                    | (73) Telefonaktiebolaget LM Ericsson (publ) | YAMADA Shohei                               |
| (87) CN2017099451                  | (72) AXMON, Joakim                          | TSUBOI Hidekazu                             |
| 05.04.2018                         | BERGSTRÖM, Mattias                          | AIBA Tatsushi                               |
| (22) 29.08.2017                    | KAZMI, Muhammad                             | TAKAHASHI Hiroki                            |
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| (72) LATTIN, William, L.<br>SEQUINO, David, R.<br>MEYER, Alan T.<br>POWELL, Gregory A.                                      | MATSUSHIMA, Hideki<br>UNAGAMI, Yuji                                                                                                      | (22) 09.04.2018                                                                                                                                                      |
| (31) 201662421878 P<br>201662421852 P<br>201762487909 P                                                                     | (31) 2015170760<br>(32) 31.08.2015<br>(33) Japan                                                                                         | (54) METHOD AND SYSTEM FOR<br>GENERATING A PRIVATE KEY FOR<br>ENCRYPTED DATA TRANSFER<br>BETWEEN AN ELECTRONIC IDENTITY<br>DOCUMENT AND A TERMINAL                   |
| (32) 14.11.2016<br>14.11.2016<br>20.04.2017                                                                                 | (51) H04L 9/08<br>H04L 9/30<br>H04L 9/32                                                                                                 | (73) RDW                                                                                                                                                             |
| (33) United States of America<br>United States of America<br>United States of America                                       | (11) EP2947810<br>(21) EP13872023.0<br>(47) 14.07.2021                                                                                   | (72) VERHEUL, Eric Robert                                                                                                                                            |
| (51) H04L 9/06<br>H04L 9/08<br>G06F 21/57                                                                                   | (87) JP2013050653<br>24.07.2014                                                                                                          | (31) 2018668<br>(32) 08.04.2017<br>(33) Netherlands                                                                                                                  |
| (11) EP3695337<br>(21) EP18800518.5<br>(47) 07.07.2021                                                                      | (22) 16.01.2013                                                                                                                          | (51) H04L 9/08<br>H04L 9/32<br>H04L 29/06<br>G06F 21/31                                                                                                              |
| (87) EP2018079361<br>13.06.2019                                                                                             | (54) ENCRYPTION SYSTEM, RE-<br>ENCRYPTION KEY GENERATION<br>DEVICE, RE-ENCRYPTION DEVICE,<br>ENCRYPTION METHOD AND<br>ENCRYPTION PROGRAM | (11) EP3607483<br>(21) EP19725903.9<br>(47) 07.07.2021                                                                                                               |
| (22) 26.10.2018                                                                                                             | (73) Mitsubishi Electric Corporation                                                                                                     | (87) CN2019078382<br>31.05.2019                                                                                                                                      |
| (54) METHOD AND CONFIRMATION<br>DEVICE FOR CONFIRMING THE<br>INTEGRITY OF A SYSTEM                                          | (72) KAWAI, Yutaka<br>TAKASHIMA, Katsuyuki                                                                                               | (22) 15.03.2019                                                                                                                                                      |
| (73) Siemens Aktiengesellschaft                                                                                             | (51) H04L 9/08<br>H04L 9/30<br>H04L 9/32<br>H04L 29/06<br>H04W 4/33<br>H04W 12/069<br>H04W 12/55                                         | (54) AUTHENTICATION BASED ON A<br>RECOVERD PUBLIC KEY                                                                                                                |
| (72) FALK, Rainer                                                                                                           | (11) EP3637726                                                                                                                           | (73) Advanced New Technologies Co., Ltd.                                                                                                                             |
| (31) 17206180                                                                                                               | (21) EP19202607.8                                                                                                                        | (72) ZHOU, Zhiyuan                                                                                                                                                   |
| (32) 08.12.2017                                                                                                             | (47) 14.07.2021                                                                                                                          | (51) H04L 9/08<br>H04L 9/32<br>H04L 29/06<br>G06Q 20/34<br>G06Q 20/38<br>G06Q 20/40<br>G06F 21/34                                                                    |
| (33) European Patent Office (EPO)                                                                                           | (22) 10.10.2019                                                                                                                          | (11) EP3599564                                                                                                                                                       |
| (51) H04L 9/06<br>H04L 9/32<br>H04L 29/06<br>G06F 21/41<br>G06F 21/62                                                       | (54) SECURED COMMUNICATION<br>BETWEEN HOST DEVICES                                                                                       | (21) EP19188594.6<br>(47) 14.07.2021                                                                                                                                 |
| (11) EP3577850                                                                                                              | (73) Ademco Inc.                                                                                                                         | (22) 26.07.2019                                                                                                                                                      |
| (21) EP17894846.9                                                                                                           | (72) NEUMANN, William<br>HANSON, Colin                                                                                                   | (54) A METHOD FOR MANAGING AN<br>ELECTRONIC DEVICE DELIVERING<br>AUTHENTICATION CODES, DEVICES<br>AND ASSOCIATED SERVERS                                             |
| (47) 14.07.2021                                                                                                             | (31) 201816158183                                                                                                                        | (73) IDEMIA France                                                                                                                                                   |
| (87) US2017016061<br>09.08.2018                                                                                             | (32) 11.10.2018                                                                                                                          | (72) LESEIGNEUR, Gilles<br>DEPRUN, Jean-François                                                                                                                     |
| (22) 01.02.2017                                                                                                             | (33) United States of America                                                                                                            | (31) 1856956<br>(32) 26.07.2018<br>(33) France                                                                                                                       |
| (54) VERIFYING AN IDENTITY BASED<br>ON MULTIPLE DISTRIBUTED DATA<br>SOURCES USING A BLOCKCHAIN TO<br>SAFEGUARD THE IDENTITY | (51) H04L 9/08<br>H04L 9/30<br>H04L 9/32<br>H04L 29/06<br>H04W 12/02<br>H04W 12/04<br>H04W 12/06                                         | (51) H04L 9/08<br>H04L 9/32<br>H04L 29/06<br>H04L 29/08<br>B60R 25/24<br>H04W 4/00<br>H04W 4/40<br>G07C 9/00<br>H04W 12/04<br>H04W 12/06<br>H04W 12/08<br>H04W 12/50 |
| (73) Equifax, Inc.                                                                                                          | (11) EP3465978                                                                                                                           | (11) EP3262860                                                                                                                                                       |
| (72) KRISHNAMACHARYA, Sri<br>LE, Quang<br>TIGRETT, Stan<br>AYRES, Russ                                                      | (21) EP16731521.7<br>(47) 07.07.2021                                                                                                     | (21) EP15823701.6<br>(47) 14.07.2021                                                                                                                                 |
| (51) H04L 9/08<br>H04L 9/14<br>H04L 9/32<br>H04L 29/06<br>G06F 21/44                                                        | (87) EP2016062150<br>07.12.2017                                                                                                          | (87) FR2015053717<br>30.06.2016                                                                                                                                      |
| (11) EP3346635                                                                                                              | (22) 30.05.2016                                                                                                                          | (22) 22.12.2015                                                                                                                                                      |
| (21) EP16841051.2                                                                                                           | (54) PROTECTION OF PRIVACY IN<br>WIRELESS TELECOMMUNICATION<br>NETWORKS                                                                  | (54) AUTOMATIC RECOGNITION METHOD<br>BETWEEN A MOBILE DEVICE AND A<br>VEHICLE USING THE BLE PROTOCOL                                                                 |
| (47) 14.07.2021                                                                                                             | (73) Telecom Italia S.p.A.                                                                                                               | (73) Valeo Comfort and Driving Assistance                                                                                                                            |
| (87) JP2016003595<br>09.03.2017                                                                                             | (72) BALTATU, Madalina<br>COSTA, Luciana<br>D'AMICO, Roberta<br>GOLIC, Jovan<br>LOMBARDO, Dario                                          |                                                                                                                                                                      |
| (22) 04.08.2016                                                                                                             | (51) H04L 9/08<br>H04L 9/32                                                                                                              |                                                                                                                                                                      |
| (54) CONTROLLER, COMMUNICATION<br>METHOD, AND COMMUNICATION<br>SYSTEM                                                       | (11) EP3386143                                                                                                                           |                                                                                                                                                                      |
| (73) Panasonic Intellectual Property<br>Management Co., Ltd.                                                                | (21) EP18166429.3                                                                                                                        |                                                                                                                                                                      |
| (72) TAKAZOE, Tomoki<br>MASUDA, Yoichi                                                                                      | (47) 07.07.2021                                                                                                                          |                                                                                                                                                                      |



|                                          |                                          |                                             |
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| (72) PETEL, Laurent                      | (11) EP3610383                           | (33) United Kingdom                         |
| (31) 1403002                             | (21) EP19725912.0                        | (51) H04L 9/32                              |
| (32) 23.12.2014                          | (47) 07.07.2021                          | (11) EP3758285                              |
| (33) France                              | (87) CN2019078944                        | (21) EP20163668.5                           |
| (51) H04L 9/08                           | 31.05.2019                               | (47) 07.07.2021                             |
| H04L 9/32                                | (22) 21.03.2019                          | (22) 17.03.2020                             |
| H04L 29/06                               | (54) DATA ISOLATION IN BLOCKCHAIN        | (54) ODD INDEX PRECOMPUTATION               |
| H04W 12/04                               | NETWORKS                                 | FOR AUTHENTICATION PATH                     |
| H04W 12/06                               | (73) Advanced New Technologies Co., Ltd. | COMPUTATION                                 |
| (11) EP2907261                           | (72) SHEN, Chao                          | (73) Intel Corporation                      |
| (21) EP13794987.1                        | ZHANG, Wenbin                            | (72) SURESH, Vikram                         |
| (47) 14.07.2021                          | LU, Xuming                               | MISOCZKI, Rafael                            |
| (87) IB2013058567                        | (51) H04L 9/14                           | MATHEW, Sanu                                |
| 24.04.2014                               | H04L 9/30                                | SASTRY, Manoj                               |
| (22) 16.09.2013                          | H04L 9/32                                | GHOSH, Santosh                              |
| (54) A WIRELESS COMMUNICATION            | H04L 29/06                               | KUMAR, Raghavan                             |
| SYSTEM                                   | (11) EP3472969                           | (31) 201916456064                           |
| (73) Koninklijke Philips N.V.            | (21) EP17720589.5                        | (32) 28.06.2019                             |
| (72) BERNSEN, Johannes Arnoldus Cornelis | (47) 14.07.2021                          | (33) United States of America               |
| (31) 12188491                            | (87) SG2017050164                        | (51) H04L 9/32                              |
| 13169721                                 | 01.02.2018                               | G06F 21/31                                  |
| (32) 15.10.2012                          | (22) 28.03.2017                          | G06F 21/45                                  |
| 29.05.2013                               | (54) A KEY GENERATION AND                | G06F 21/60                                  |
| (33) European Patent Office (EPO)        | DISTRIBUTION METHOD BASED ON             | (11) EP3437003                              |
| European Patent Office (EPO)             | IDENTITY-BASED CRYPTOGRAPHY              | (21) EP16897460.8                           |
| (51) H04L 9/08                           | (73) Huawei International Pte. Ltd.      | (47) 14.07.2021                             |
| H04L 29/06                               | (72) WANG, Haiguang                      | (87) US2016069460                           |
| H04W 8/06                                | SHI, Jie                                 | 05.10.2017                                  |
| H04W 12/04                               | KANG, Xin                                | (22) 30.12.2016                             |
| H04W 12/06                               | (31) 10201606165S                        | (54) SYSTEM AND METHOD EMPLOYING            |
| (11) EP3565291                           | (32) 26.07.2016                          | REDUCED TIME DEVICE                         |
| (21) EP17908591.5                        | (33) Singapore                           | PROCESSING                                  |
| (47) 07.07.2021                          | (51) H04L 9/30                           | (73) Visa International Service Association |
| (87) CN2017083072                        | H04L 29/06                               | (72) HURRY, Simon                           |
| 08.11.2018                               | G06F 21/64                               | CLARK, Aron                                 |
| (22) 04.05.2017                          | (11) EP3639185                           | CLEVEN, Marc                                |
| (54) METHOD AND DEVICE                   | (21) EP18769118.3                        | (31) 201662317450 P                         |
| FOR ACQUIRING KEY AND                    | (47) 14.07.2021                          | 201615171982                                |
| COMMUNICATION SYSTEM                     | (87) EP2018073874                        | (32) 01.04.2016                             |
| (73) Huawei Technologies Co., Ltd.       | 14.03.2019                               | 02.06.2016                                  |
| (72) CHEN, Jing                          | (22) 05.09.2018                          | (33) United States of America               |
| PAN, Kai                                 | (54) NETWORK, METHOD AND COMPUTER        | United States of America                    |
| LI, He                                   | PROGRAM PRODUCT FOR                      | (51) H04L 9/32                              |
| (51) H04L 9/08                           | ORGANIZING AND PROCESSING                | G06F 21/64                                  |
| H04W 36/00                               | DATA                                     | (11) EP3619889                              |
| H04W 12/041                              | (73) Dataunit AS                         | (21) EP19732212.6                           |
| H04W 12/0433                             | (72) RONG, Chunming                      | (47) 07.07.2021                             |
| H04W 12/40                               | CAYIRCI, Erdal                           | (87) CN2019079800                           |
| (11) EP3449664                           | (31) 201715698347                        | 27.06.2019                                  |
| (21) EP17788877.3                        | (32) 07.09.2017                          | (22) 27.03.2019                             |
| (47) 07.07.2021                          | (33) United States of America            | (54) RETRIEVING PUBLIC DATA FOR             |
| (87) FI2017050298                        | (51) H04L 9/32                           | BLOCKCHAIN NETWORKS USING                   |
| 02.11.2017                               | (11) EP3685545                           | HIGHLY AVAILABLE TRUSTED                    |
| (22) 20.04.2017                          | (21) EP18779447.4                        | EXECUTION ENVIRONMENTS                      |
| (54) SECURITY KEY USAGE ACROSS           | (47) 07.07.2021                          | (73) Advanced New Technologies Co., Ltd.    |
| HANDOVER THAT KEEPS THE SAME             | (87) IB2018056908                        | (72) YU, Yirong                             |
| WIRELESS TERMINATION                     | 21.03.2019                               | (51) H04L 9/32                              |
| (73) Nokia Technologies Oy               | (22) 11.09.2018                          | G06Q 20/38                                  |
| (72) LASELVA, Daniela                    | (54) BLOCKCHAIN-BASED SYSTEMS AND        | (11) EP3628093                              |
| KOVACS, Istvan Zsolt                     | METHODS FOR COMMUNICATING,               | (21) EP19738647.7                           |
| (31) 201662329531 P                      | STORING AND PROCESSING DATA              | (47) 07.07.2021                             |
| (32) 29.04.2016                          | OVER A BLOCKCHAIN NETWORK                | (87) CN2019085212                           |
| (33) United States of America            | (73) Nchain Holdings Limited             | 18.07.2019                                  |
| (51) H04L 9/12                           | (72) BARTOLUCCI, Silvia                  | (22) 30.04.2019                             |
| H04L 9/32                                | BERNAT, Pauline                          | (54) METHOD AND DEVICE FOR AVOIDING         |
| G06F 16/18                               | JOSEPH, Daniel                           | DOUBLE-SPENDING PROBLEM IN                  |
| G06F 16/182                              | (31) 201714987                           | READ-WRITE SET-MODEL-BASED                  |
| G06F 16/22                               | (32) 18.09.2017                          | BLOCKCHAIN TECHNOLOGY                       |

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| (73) Advanced New Technologies Co., Ltd. | (21) EP19739184.0                           | (32) 02.05.2016                             |
| (72) FENG, Zhiyuan                       | (47) 07.07.2021                             | (33) United States of America               |
| (51) H04L 9/32                           | (87) CN2019084510                           | (51) H04L 9/32                              |
| H04L 29/06                               | 18.07.2019                                  | H04L 29/06                                  |
| (11) EP3701463                           | (22) 26.04.2019                             | H04W 24/08                                  |
| (21) EP19799222.5                        | (54) ANTI-REPLAY ATTACK                     | H04W 48/04                                  |
| (47) 07.07.2021                          | AUTHENTICATION PROTOCOL                     | H04W 48/12                                  |
| (87) US2019031567                        | (73) Advanced New Technologies Co., Ltd.    | G06F 21/31                                  |
| 14.11.2019                               | (72) LV, Hong                               | H04W 4/02                                   |
| (22) 09.05.2019                          | (51) H04L 9/32                              | H04W 4/80                                   |
| (54) BLOCKCHAIN DATA PROCESSING          | H04L 29/06                                  | H04W 12/06                                  |
| METHODS, APPARATUSES,                    | H04L 29/08                                  | (11) EP3734904                              |
| PROCESSING DEVICES, AND                  | G06Q 20/12                                  | (21) EP20182662.5                           |
| SYSTEMS                                  | G06Q 20/40                                  | (47) 14.07.2021                             |
| (73) Advanced New Technologies Co., Ltd. | G06Q 30/06                                  | (22) 27.08.2015                             |
| (72) WANG, Husen                         | G06F 21/31                                  | (54) METHOD AND DEVICE FOR                  |
| LU, Xuming                               | G06F 21/41                                  | VERIFYING USER BEHAVIOUR IN                 |
| (31) 201810444320                        | G06F 21/44                                  | MOBILE SCENARIO                             |
| (32) 10.05.2018                          | G06F 21/62                                  | (73) Advanced New Technologies Co., Ltd.    |
| (33) China                               | G06F 16/957                                 | (72) WANG, Sen                              |
| (51) H04L 9/32                           | (11) EP3432541                              | YAO, Yunjiao                                |
| H04L 29/06                               | (21) EP17765719.4                           | (31) 201410441814                           |
| (11) EP3528464                           | (47) 07.07.2021                             | (32) 01.09.2014                             |
| (21) EP19158151.1                        | (87) CN2017075459                           | (33) China                                  |
| (47) 14.07.2021                          | 21.09.2017                                  | (51) H04L 9/32                              |
| (22) 19.02.2019                          | (22) 02.03.2017                             | H04W 8/00                                   |
| (54) METHOD OF PAIRING OF                | (54) WEB SITE LOGIN METHOD AND              | H04W 48/18                                  |
| ELECTRONIC TERMINALS, PAIRING            | APPARATUS                                   | H04W 84/12                                  |
| DEVICES AND CORRESPONDING                | (73) Advanced New Technologies Co., Ltd.    | H04W 88/08                                  |
| PROGRAM.                                 | (72) FAN, Xiaofeng                          | H04W 12/06                                  |
| (73) Ingenico Inc.                       | (31) 201610147571                           | H04W 12/069                                 |
| (72) ROTSAERT, Christopher               | (32) 15.03.2016                             | H04W 12/50                                  |
| (31) 1851415                             | (33) China                                  | (11) EP3598842                              |
| (32) 19.02.2018                          | (51) H04L 9/32                              | (21) EP18184773.2                           |
| (33) France                              | H04L 29/06                                  | (47) 14.07.2021                             |
| (51) H04L 9/32                           | H04L 29/12                                  | (22) 20.07.2018                             |
| H04L 29/06                               | (11) EP3549325                              | (54) NETWORK SHARING                        |
| G06F 21/10                               | (21) EP18865360.4                           | (73) Nokia Technologies Oy                  |
| (11) EP3673640                           | (47) 07.07.2021                             | (72) SIGNORINI, Matteo                      |
| (21) EP19741033.5                        | (87) CN2018115926                           | PONTECORVI, Matteo                          |
| (47) 14.07.2021                          | 18.04.2019                                  | (51) H04L 12/00                             |
| (87) CN2019087053                        | (22) 16.11.2018                             | H04L 29/08                                  |
| 25.07.2019                               | (54) CROSS-CHAIN INTERACTIONS               | (11) EP3465443                              |
| (22) 15.05.2019                          | USING A DOMAIN NAME SCHEME IN               | (21) EP17732641.0                           |
| (54) PROCESSING DATA ELEMENTS            | BLOCKCHAIN SYSTEMS                          | (47) 07.07.2021                             |
| STORED IN BLOCKCHAIN NETWORKS            | (73) Advanced New Technologies Co., Ltd.    | (87) US2017034753                           |
| (73) Advanced New Technologies Co., Ltd. | (72) QIU, Honglin                           | 30.11.2017                                  |
| (51) H04L 9/32                           | (51) H04L 9/32                              | (22) 26.05.2017                             |
| H04L 29/06                               | H04L 29/06                                  | (54) CACHED DATA REPURPOSING                |
| G06F 21/53                               | H04W 12/06                                  | (73) Home Box Office, Inc.                  |
| G06F 21/62                               | H04W 12/10                                  | (72) GAY, Allen Arthur                      |
| (11) EP3610624                           | H04W 12/12                                  | (31) 201615167288                           |
| (21) EP19732236.5                        | (11) EP3453199                              | (32) 27.05.2016                             |
| (47) 07.07.2021                          | (21) EP16801449.6                           | (33) United States of America               |
| (87) CN2019080478                        | (47) 07.07.2021                             | (51) H04L 12/14                             |
| 27.06.2019                               | (87) EP2016078698                           | H04L 12/911                                 |
| (22) 29.03.2019                          | 09.11.2017                                  | (11) EP3692684                              |
| (54) RETRIEVING ACCESS DATA FOR          | (22) 24.11.2016                             | (21) EP17787896.4                           |
| BLOCKCHAIN NETWORKS USING                | (54) AUTHENTICATING A MESSAGE IN A          | (47) 07.07.2021                             |
| HIGHLY AVAILABLE TRUSTED                 | WIRELESS COMMUNICATION SYSTEM               | (87) EP2017075560                           |
| EXECUTION ENVIRONMENTS                   | (73) Telefonaktiebolaget LM Ericsson (PUBL) | 11.04.2019                                  |
| (73) Advanced New Technologies Co., Ltd. | (72) NAKARMI, Prajwol, Kumar                | (22) 06.10.2017                             |
| (72) YU, Yirong                          | LEHTOVIRTA, Vesa                            | (54) INCREMENTAL BILLING WITH               |
| (51) H04L 9/32                           | TORVINEN, Vesa                              | BLOCKCHAINS                                 |
| H04L 29/06                               | WIFVESSON, Monica                           | (73) Telefonaktiebolaget LM Ericsson (publ) |
| G06Q 20/38                               | FOLKE, Mats                                 | Ericsson Telekommunikation GmbH             |
| (11) EP3639232                           | BEN HENDA, Noamen                           | (72) DINKELAKER, Tom                        |
|                                          | (31) 201662330456 P                         | DITTSCHAR, Armin                            |

|                                                           |                                                      |                                                 |
|-----------------------------------------------------------|------------------------------------------------------|-------------------------------------------------|
| PIERAS, Markus                                            | (22) 15.02.2017                                      | NARAYANAN, Karthik                              |
| SCHOLZ, Heike                                             | (54) NETWORK LOG TIME ALIGNMENT METHOD AND APPARATUS | FROST, Megan                                    |
| (51) H04L 12/14                                           | (73) Huawei Technologies Co. Ltd.                    | GAUTIER, Patrice Olivier                        |
| H04M 15/00                                                | (72) BAO, Dewei                                      | HAJJ, Usama Mikael                              |
| G06Q 30/00                                                | (31) 201213488438                                    | (31) 201213488438                               |
| G06Q 30/02                                                | (32) 04.06.2012                                      | (32) 04.06.2012                                 |
| (11) EP2870577                                            | (33) United States of America                        | (33) United States of America                   |
| (21) EP13714302.0                                         | (51) H04L 12/24                                      | (51) H04L 12/24                                 |
| (47) 14.07.2021                                           | H04L 12/26                                           | H04L 12/26                                      |
| (87) EP2013057191                                         | (11) EP3605954                                       | (11) EP3605954                                  |
| 17.10.2013                                                | (21) EP18805699.8                                    | (21) EP18805699.8                               |
| (22) 05.04.2013                                           | (47) 07.07.2021                                      | (47) 07.07.2021                                 |
| (54) CONDITIONAL POLICY CONTROL                           | (87) CN2018086162                                    | (87) CN2018086162                               |
| (73) Nokia Solutions and Networks Oy                      | 29.11.2018                                           | 29.11.2018                                      |
| (72) RASANEN, Juha, Antero                                | (22) 09.05.2018                                      | (22) 09.05.2018                                 |
| (31) PCT/EP2012/056524                                    | (54) STATE DETECTION OF NETCONF SESSION              | (54) STATE DETECTION OF NETCONF SESSION         |
| (32) 11.04.2012                                           | (73) New H3C Technologies Co., Ltd                   | (73) New H3C Technologies Co., Ltd              |
| (33) World Intellectual Property Office (WIPO)            | (72) WANG, Han                                       | (72) WANG, Han                                  |
| (51) H04L 12/18                                           | (31) 201710383893                                    | (31) 201710383893                               |
| H04L 12/58                                                | (32) 26.05.2017                                      | (32) 26.05.2017                                 |
| (11) EP3367614                                            | (33) China                                           | (33) China                                      |
| (21) EP17187433.2                                         | (51) H04L 12/24                                      | (51) H04L 12/24                                 |
| (47) 14.07.2021                                           | H04L 12/26                                           | H04L 12/26                                      |
| (22) 23.08.2017                                           | H04L 29/06                                           | H04L 29/06                                      |
| (54) NOTIFICATION FRAMEWORK FOR SMART OBJECTS             | H04L 12/937                                          | H04L 12/937                                     |
| (73) Facebook, Inc.                                       | (11) EP3266174                                       | (11) EP3266174                                  |
| (72) Pan, Christopher Chun-Ning                           | (21) EP15890979.6                                    | (21) EP15890979.6                               |
| Penov, Francislav                                         | (47) 14.07.2021                                      | (47) 14.07.2021                                 |
| Beatte, Arthur                                            | (87) US2015028605                                    | (87) US2015028605                               |
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| World Intellectual Property Office (WIPO)                 | DAHLMAN, Erik                                        | DAHLMAN, Erik                                   |
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| SIM, Wha-seob                                                           | United States of America                                   | (73) New H3C Technologies Co., Ltd.                                                                          |
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| (73) Red Bend Ltd.                    | (72) KIM, Hee Jung                       | INTERNET PROTOCOL MULTIMEDIA         |
| (72) RUVIO, Guy                       | CHO, Nam Kyu                             | SUBSYSTEM (IMS)                      |
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| BUS                                   | LIU, Huayijun                            | (73) Equinix, Inc.                   |
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| (73) Telefonaktiebolaget LM Ericsson (publ) | (54) APPARATUS FOR GENERATING               | (51) H04L 29/06                           |
| (72) ANAND, Prashant                        | DOWN LINK SIGNAL, AND METHOD                | (11) EP3130123                            |
| (31) 201414542805                           | AND APPARATUS FOR CELL SEARCH               | (21) EP15712379.5                         |
| (32) 17.11.2014                             | IN CELLULAR SYSTEM                          | (47) 07.07.2021                           |
| (33) United States of America               | (73) SK Telecom Co., Ltd                    | (87) EP2015056695                         |
| (51) H04L 12/721                            | (72) CHANG, Kap-Seok                        | 15.10.2015                                |
| H04L 12/741                                 | KIM, Il-Gyu                                 | (22) 27.03.2015                           |
| H04L 12/851                                 | KIM, Nam-Il                                 | (54) DETECTION OF MANIPULATION OF         |
| H04L 12/931                                 | KIM, Young-Hoon                             | APPLICATIONS                              |
| (11) EP3499815                              | BANG, Seung-Chan                            | (73) HDIV Security, S.L.                  |

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| (72) VELASCO SARASOLA, Roberto           | (33) United States of America    | (21) EP19164863.3                         |
| (31) 14382140                            | United States of America         | (47) 14.07.2021                           |
| (32) 11.04.2014                          |                                  | (22) 25.03.2019                           |
| (33) European Patent Office (EPO)        | (51) H04L 29/06                  | (54) METHOD AND SYSTEM FOR MOVING         |
| (51) H04L 29/06                          | G06F 21/55                       | CUSTOMER DATA TO TRUSTED                  |
| (11) EP3297243                           | G06F 21/85                       | STORAGE                                   |
| (21) EP16792021.4                        | H04W 12/12                       | (73) Mitel Cloud Services, Inc.           |
| (47) 07.07.2021                          | (11) EP3274845                   | (72) TAM, Terry                           |
| (87) CN2016079555                        | (21) EP15886169.0                | (31) 201815937952                         |
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| (22) 18.04.2016                          | (87) IL2015050319                | (33) United States of America             |
| (54) TRUSTED LOGIN METHOD AND            | 29.09.2016                       | (51) H04L 29/06                           |
| DEVICE                                   | (22) 26.03.2015                  | H04L 29/08                                |
| (73) Advanced New Technologies Co., Ltd. | (54) SECURITY SYSTEMS AND METHOD | H04W 4/80                                 |
| (72) ZHOU, Zhizhang                      | FOR IDENTIFICATION OF IN-VEHICLE | H04W 76/10                                |
| (31) 201510239796                        | ATTACK ORIGINATOR                | H04W 12/06                                |
| (32) 12.05.2015                          | (73) Red Bend Ltd.               | (11) EP2962483                            |
| (33) China                               | (72) RUVIO, Guy                  | (21) EP13876719.9                         |
| (51) H04L 29/06                          | DICKMAN, Saar                    | (47) 14.07.2021                           |
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| (54) RETRIEVING SUPPLEMENTAL             | (21) EP19828453.1                | TARGET DEVICE TO PERFORM NEXT             |
| CONTENT                                  | (47) 14.07.2021                  | STATE                                     |
| (73) Comcast Cable Communications, LLC   | (87) US2019064690                | (73) Hewlett-Packard Development Company, |
| (72) Walker, Severin                     | 16.07.2020                       | L.P.                                      |
| (31) 201414200508                        | (22) 05.12.2019                  | (72) ANDERSON, Paul Michael               |
| (32) 07.03.2014                          | (54) ENHANCED ONLINE PRIVACY     | (51) H04L 29/06                           |
| (33) United States of America            | (73) Google LLC                  | H04L 29/08                                |
| (51) H04L 29/06                          | (72) WANG, Yuewei                | H04W 36/00                                |
| (11) EP3675455                           | CHAUDHARY, Shashank              | (11) EP3285519                            |
| (21) EP20154606.6                        | SOYSAL, Onur                     | (21) EP17173473.4                         |
| (47) 14.07.2021                          | ORTEGA-BINDERBERGER, Michael     | (47) 14.07.2021                           |
| (22) 18.03.2016                          | (31) 201916245048                | (22) 03.10.2011                           |
| (54) BI-DIRECTIONAL DATA SECURITY        | (32) 10.01.2019                  | (54) INTER-USER EQUIPMENT                 |
| FOR SUPERVISOR CONTROL AND               | (33) United States of America    | (UE) TRANSFER (IUT) FOR                   |
| DATA ACQUISITION NETWORKS                | (51) H04L 29/06                  | COLLABORATIVE SESSIONS                    |
| (73) Sierra Nevada Corporation           | H04L 29/08                       | THAT INCLUDE MEDIA SESSION                |
| (72) FISCHER, Peter                      | G06F 21/10                       | INFORMATION                               |
| FELDKAMP, Andrew                         | G06F 21/53                       | (73) Interdigital Patent Holdings, Inc.   |
| RODRIGUEZ, Nelson                        | G06F 9/455                       | (72) De Foy, Xavier                       |
| EDWARDS, Joshua                          | H04W 12/08                       | Lotfallah, Osama                          |
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| G06F 21/56                               | (22) 20.10.2017                  | H04L 29/12                                |
| G06F 21/62                               | (54) SECURE CLOUD-MANAGED        | H04W 52/02                                |
| G06F 21/71                               | CONTENT DELIVERY COMPUTER        | H04W 76/25                                |
| (11) EP3465519                           | ECOSYSTEM                        | (11) EP2705724                            |
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| (47) 07.07.2021                          | (72) NEALIS, Michael             | (47) 14.07.2021                           |
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| (54) SYSTEM AND METHOD FOR               | 201715593159                     | (54) KEEP-ALIVE SIGNALLING                |
| BRIDGING CYBER-SECURITY THREAT           | 201715594441                     | (73) Nokia Technologies Oy                |
| INTELLIGENCE INTO A PROTECTED            | (32) 08.11.2016                  | (72) KORHONEN, Jouni                      |
| SYSTEM USING SECURE MEDIA                | 11.05.2017                       | ISOMAKI, Markus                           |
| (73) Honeywell International Inc.        | 12.05.2017                       | BAJKO, Gabor                              |
| (72) KNAPP, Eric D.                      | (33) United States of America    | (51) H04L 29/06                           |
| BOICE, Eric T.                           | United States of America         | H04W 4/70                                 |
| (31) 201662345637 P                      | United States of America         | H04W 12/06                                |
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| (22) 06.02.2018                                                             | (21) EP17722596.8                                                                                       | H04W 80/06                                                                                               |
| (54) SECURING COMMUNICATION OF<br>DEVICES IN THE INTERNET OF<br>THINGS      | (47) 07.07.2021                                                                                         | (11) EP3625944                                                                                           |
| (73) PCMS Holdings, Inc.                                                    | (87) US2017029730                                                                                       | (21) EP17726581.6                                                                                        |
| (72) SCHMIDT, Andreas                                                       | 02.11.2017                                                                                              | (47) 07.07.2021                                                                                          |
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| (32) 06.02.2017                                                             | (54) FACILITATING INTERACTION AMONG<br>DIGITAL PERSONAL ASSISTANTS                                      | 22.11.2018                                                                                               |
| (33) United States of America                                               | (73) Microsoft Technology Licensing, LLC                                                                | (22) 19.05.2017                                                                                          |
| (51) H04L 29/06                                                             | (72) LIENSBERGER, Christian                                                                             | (54) TECHNIQUE FOR ENABLING<br>MULTIPATH TRANSMISSION                                                    |
| H04W 12/00                                                                  | MAHADEVAN, Varsha                                                                                       | (73) Telefonaktiebolaget LM Ericsson (publ)                                                              |
| H04W 12/08                                                                  | HAMAKER, Jonathan E.                                                                                    | (72) RÁCZ, Sándor                                                                                        |
| H04W 12/37                                                                  | PLUMPE, Michael D.                                                                                      | FEJES, Ferenc                                                                                            |
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| (22) 17.09.2013                                                             | (51) H04L 29/06                                                                                         | (11) EP3644687                                                                                           |
| (54) DATA MANAGEMENT FOR AN<br>APPLICATION WITH MULTIPLE<br>OPERATION MODES | H04W 12/06                                                                                              | (21) EP17922260.9                                                                                        |
| (73) Citrix Systems, Inc.                                                   | (11) EP3582469                                                                                          | (47) 07.07.2021                                                                                          |
| (72) LANG, Zhongmin                                                         | (21) EP19179851.1                                                                                       | (87) CN2017098615                                                                                        |
| BARTON, Gary                                                                | (47) 07.07.2021                                                                                         | 28.02.2019                                                                                               |
| DESAI, Nitin                                                                | (22) 13.06.2019                                                                                         | (22) 23.08.2017                                                                                          |
| WALKER, James R.                                                            | (54) AUTHENTICATION USING A MOBILE<br>NETWORK OPERATOR SYSTEM                                           | (54) DATA TRANSMISSION METHOD,<br>TRANSMITTING TERMINAL DEVICE<br>AND RECEIVING TERMINAL DEVICE          |
| (31) 201361806577 P                                                         | (73) Koninklijke KPN N.V.                                                                               | (73) GUANGDONG OPPO MOBILE<br>TELECOMMUNICATIONS CORP., LTD.                                             |
| 201313886889                                                                | (72) Appelboom, Hubertus Mattheus                                                                       | (72) TANG, Hai                                                                                           |
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| United States of America                                                    | (21) EP19219464.5                                                                                       | (22) 30.03.2016                                                                                          |
| United States of America                                                    | (47) 07.07.2021                                                                                         | (54) RELAY TRANSMISSION METHOD AND<br>DEVICE                                                             |
| United States of America                                                    | (22) 19.01.2018                                                                                         | (73) GUANGDONG OPPO MOBILE<br>TELECOMMUNICATIONS CORP., LTD.                                             |
| United States of America                                                    | (54) TECHNIQUES FOR SECURELY<br>COMMUNICATING A DATA PACKET<br>VIA AT LEAST ONE RELAY USER<br>EQUIPMENT | (72) FENG, Bin                                                                                           |
| (51) H04L 29/06                                                             | (73) QUALCOMM Incorporated                                                                              | (51) H04L 29/06                                                                                          |
| H04W 12/02                                                                  | (72) LEE, Soo Bum                                                                                       | H04W 88/06                                                                                               |
| H04W 64/00                                                                  | HORN, Gavin Bernard                                                                                     | H04W 12/06                                                                                               |
| H04W 84/12                                                                  | PALANIGOUNDER, Anand                                                                                    | (11) EP3485668                                                                                           |
| H04W 4/02                                                                   | (31) 201762454678 P                                                                                     | (21) EP17724509.9                                                                                        |
| H04W 4/90                                                                   | 201715705786                                                                                            | (47) 07.07.2021                                                                                          |
| H04W 12/00                                                                  | (32) 03.02.2017                                                                                         | (87) EP2017060773                                                                                        |
| H04W 12/06                                                                  | 15.09.2017                                                                                              | 25.01.2018                                                                                               |
| H04W 12/08                                                                  | (33) United States of America                                                                           | (22) 05.05.2017                                                                                          |
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| (21) EP15888054.2                                                           | (51) H04L 29/06                                                                                         | (73) Telefonaktiebolaget LM Ericsson (PUBL)                                                              |
| (47) 07.07.2021                                                             | H04W 48/00                                                                                              | (72) CASTELLANOS ZAMORA, David                                                                           |
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| 06.10.2016                                                                  | H04W 68/12                                                                                              | TORVINEN, Vesa                                                                                           |
| (22) 30.09.2015                                                             | H04W 88/06                                                                                              | WANG, Cheng                                                                                              |
| (54) LOCATION INFORMATION FOR VOICE<br>OVER WLAN EMERGENCY CALLING          | H04W 76/16                                                                                              | (31) PCT/CN2016/090304                                                                                   |
| (73) Intel IP Corporation                                                   | (11) EP3550886                                                                                          | (32) 18.07.2016                                                                                          |
| (72) STOJANOVSKI, Alexandre S.                                              | (21) EP18882287.8                                                                                       | (33) World Intellectual Property Office (WIPO)                                                           |
| PINHEIRO, Ana Lucia A.                                                      | (47) 07.07.2021                                                                                         | (51) H04L 29/06                                                                                          |
| VENKATACHALAM, Muthaiah                                                     | (87) CN2018076042                                                                                       | (11) EP3456030                                                                                           |
| (31) 201562139361 P                                                         | 15.08.2019                                                                                              | (21) EP17724183.3                                                                                        |
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| (33) United States of America                                               | (54) VOICE OVER IMS INCOMING SESSION                                                                    |                                                                                                          |
| (51) H04L 29/06                                                             | (73) GUANGDONG OPPO MOBILE<br>TELECOMMUNICATIONS CORP., LTD.                                            |                                                                                                          |
| H04W 12/06                                                                  | (72) TANG, Hai                                                                                          |                                                                                                          |



|                                                                    |                                                                                                                |                                                                                                                                                                            |
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| (87) US2017031126<br>16.11.2017                                    | (72) LI, Yi<br>(31) 201710191462                                                                               | H04W 36/08                                                                                                                                                                 |
| (22) 04.05.2017                                                    | (32) 28.03.2017                                                                                                | H04W 84/00                                                                                                                                                                 |
| (54) UPDATING A TRANSPORT STACK IN A<br>CONTENT CENTRIC NETWORK    | (33) China                                                                                                     | H04W 88/04                                                                                                                                                                 |
| (73) Cisco Technology, Inc.                                        | (51) H04L 29/08                                                                                                | H04W 4/02                                                                                                                                                                  |
| (72) FOX, Kevin C.                                                 | (11) EP3160112                                                                                                 | H04W 4/40                                                                                                                                                                  |
| SCOTT, Glenn C.                                                    | (21) EP16191638.2                                                                                              | H04W 4/42                                                                                                                                                                  |
| (31) 201615154837                                                  | (47) 14.07.2021                                                                                                | H04W 4/44                                                                                                                                                                  |
| (32) 13.05.2016                                                    | (22) 30.09.2016                                                                                                | (11) EP3668129                                                                                                                                                             |
| (33) United States of America                                      | (54) REMINDING METHOD AND DEVICE                                                                               | (21) EP19175345.8                                                                                                                                                          |
| (51) H04L 29/08                                                    | (73) Xiaomi Inc.                                                                                               | (47) 14.07.2021                                                                                                                                                            |
| (11) EP3482554                                                     | (72) LIU, Daokuan                                                                                              | (22) 20.05.2019                                                                                                                                                            |
| (21) EP17742353.0                                                  | TANG, Yao                                                                                                      | (54) METHOD AND SYSTEM FOR<br>DETERMINING THE LOCATION OF A<br>VEHICLE IN A CELLULAR NETWORK                                                                               |
| (47) 07.07.2021                                                    | LIU, Shuai                                                                                                     | (73) KONTRON TRANSPORTATION<br>FRANCE SAS                                                                                                                                  |
| (87) US2017041123                                                  | YANG, Chunhe                                                                                                   | (72) TANE, Pierre                                                                                                                                                          |
| 11.01.2018                                                         | XING, Xinyan                                                                                                   | JACQUES, Roger                                                                                                                                                             |
| (22) 07.07.2017                                                    | (31) 201510640419                                                                                              | BOTET, Gil                                                                                                                                                                 |
| (54) METHODS AND SERVERS TO<br>MONITOR RESOURCES THROUGH<br>HTTP/2 | (32) 30.09.2015                                                                                                | GRUET, Christophe                                                                                                                                                          |
| (73) Convida Wireless, LLC                                         | (33) China                                                                                                     | (31) 18212266                                                                                                                                                              |
| (72) DI GIROLAMO, Rocco                                            | (51) H04L 29/08                                                                                                | (32) 13.12.2018                                                                                                                                                            |
| LI, Hongkun                                                        | G06Q 30/02                                                                                                     | (33) European Patent Office (EPO)                                                                                                                                          |
| LY, Quang                                                          | (11) EP3525418                                                                                                 | (51) H04L 29/12                                                                                                                                                            |
| WANG, Chonggang                                                    | (21) EP17868227.4                                                                                              | (11) EP3422677                                                                                                                                                             |
| CHOYI, Vinod Kumar                                                 | (47) 14.07.2021                                                                                                | (21) EP18175311.2                                                                                                                                                          |
| CHEN, Zhuo                                                         | (87) CN2017107497                                                                                              | (47) 14.07.2021                                                                                                                                                            |
| LI, Xu                                                             | 11.05.2018                                                                                                     | (22) 31.05.2018                                                                                                                                                            |
| RAHMAN, Shamim Akbar                                               | (22) 24.10.2017                                                                                                | (54) TRANSLATION BETWEEN A FIRST<br>VERSION OF INTERNET PROTOCOL<br>AND A SECOND VERSION OF<br>INTERNET PROTOCOL WHEN AN<br>APPLICATION LAYER GATEWAY (ALG)<br>IS INVOLVED |
| MLADIN, Catalina Mihaela                                           | (54) METHOD AND DEVICE FOR PUSHING<br>INFORMATION                                                              | (73) Juniper Networks, Inc.                                                                                                                                                |
| STARSINIC, Michael F.                                              | (73) Advanced New Technologies Co., Ltd.                                                                       | (72) KUPPANNAN, Jayaraghavendran                                                                                                                                           |
| (31) 201662359849 P                                                | (72) SUN, Renen                                                                                                | O S, Sridhar                                                                                                                                                               |
| (32) 08.07.2016                                                    | (31) 201610978785                                                                                              | GUPTA, Neeraj                                                                                                                                                              |
| (33) United States of America                                      | (32) 07.11.2016                                                                                                | (31) 201715637467                                                                                                                                                          |
| (51) H04L 29/08                                                    | (33) China                                                                                                     | (32) 29.06.2017                                                                                                                                                            |
| (11) EP3622696                                                     | (51) H04L 29/08                                                                                                | (33) United States of America                                                                                                                                              |
| (21) EP18721569.4                                                  | H04L 12/911                                                                                                    | (51) H04L 29/12                                                                                                                                                            |
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| (22) 11.04.2018                                                    | (22) 25.09.2018                                                                                                | (47) 14.07.2021                                                                                                                                                            |
| (54) DISTRIBUTION OF EVENTS IN EDGE<br>DEVICES                     | (54) METHOD FOR TRANSMITTING<br>DATA WITHIN AN INDUSTRIAL<br>COMMUNICATION NETWORK AND<br>COMMUNICATION DEVICE | (87) US2018015399                                                                                                                                                          |
| (73) Microsoft Technology Licensing, LLC                           | (73) Siemens Aktiengesellschaft                                                                                | 09.08.2018                                                                                                                                                                 |
| (72) GEORGE, Samuel John                                           | (72) Chen, Feng                                                                                                | (22) 26.01.2018                                                                                                                                                            |
| SKINNER, Cameron William                                           | Götz, Franz-Josef                                                                                              | (54) IP INDEX FOR IP ADDRESS<br>ALLOCATION BASED ON POLICY<br>CONTROL FUNCTION                                                                                             |
| DAMAGGIO, Elio                                                     | Kießling, Marcel                                                                                               | (73) T-Mobile USA, Inc.                                                                                                                                                    |
| DAR, Affan                                                         | Nguyen, An Ninh                                                                                                | (72) JOUL, Christopher H.                                                                                                                                                  |
| YAGLEY, Michael R.                                                 | Schmitt, Jürgen                                                                                                | (31) 201762454498 P                                                                                                                                                        |
| PURANIK, Varun                                                     | (51) H04L 29/08                                                                                                | 201715648932                                                                                                                                                               |
| ANTOCHI, Anca Mihaela                                              | H04W 4/02                                                                                                      | (32) 03.02.2017                                                                                                                                                            |
| (31) 201762503787 P                                                | H04W 4/021                                                                                                     | 13.07.2017                                                                                                                                                                 |
| 201715784046                                                       | H04W 4/33                                                                                                      | (33) United States of America                                                                                                                                              |
| (32) 09.05.2017                                                    | (11) EP3457669                                                                                                 | United States of America                                                                                                                                                   |
| 13.10.2017                                                         | (21) EP18194305.1                                                                                              | (51) H04L 29/12                                                                                                                                                            |
| (33) United States of America                                      | (47) 07.07.2021                                                                                                | H04W 36/18                                                                                                                                                                 |
| United States of America                                           | (22) 13.09.2018                                                                                                | (11) EP3627897                                                                                                                                                             |
| (51) H04L 29/08                                                    | (54) METHOD, DEVICE AND COMPUTER-<br>READABLE STORAGE MEDIUM FOR<br>SENDING MESSAGES                           | (21) EP18823492.6                                                                                                                                                          |
| (11) EP3547648                                                     | (73) Beijing Xiaomi Mobile Software Co., Ltd.                                                                  | (47) 07.07.2021                                                                                                                                                            |
| (21) EP18775664.8                                                  | (72) XIE, Yan                                                                                                  | (87) CN2018087860                                                                                                                                                          |
| (47) 07.07.2021                                                    | (31) 201710839670                                                                                              | 03.01.2019                                                                                                                                                                 |
| (87) CN2018080461                                                  | (32) 18.09.2017                                                                                                | (22) 22.05.2018                                                                                                                                                            |
| 04.10.2018                                                         | (33) China                                                                                                     |                                                                                                                                                                            |
| (22) 26.03.2018                                                    | (51) H04L 29/08                                                                                                |                                                                                                                                                                            |
| (54) SERVICE PROCESSING AND<br>CONSENSUS METHOD AND DEVICE         |                                                                                                                |                                                                                                                                                                            |
| (73) Advanced New Technologies Co., Ltd.                           |                                                                                                                |                                                                                                                                                                            |

|                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) APPLICATION INSTANCE ADDRESS<br>TRANSLATION METHOD AND<br>APPARATUS                                                                                                                                                                                                                                         | H04M 3/533<br>H04W 4/12<br>H04W 4/16                                                                                                                                                                                                                                                                                   | BARZUZA, Tamar<br>(31) 201816201579<br>(32) 27.11.2018<br>(33) United States of America                                                                                                                                                                                           |
| (73) Huawei Technologies Co., Ltd.<br>(72) JIN, Aijin<br>ZHANG, Fengyu<br>WANG, Yan<br>(31) 201710530099<br>(32) 30.06.2017<br>(33) China                                                                                                                                                                        | (11) EP2327235<br>(21) EP09813794.6<br>(47) 14.07.2021<br>(87) US2009056978<br>18.03.2010<br>(22) 15.09.2009                                                                                                                                                                                                           | (51) H04M 3/54<br>H04W 4/12<br>H04W 4/16<br>H04W 8/02<br>H04W 88/16<br>H04W 4/60<br>H04W 12/06                                                                                                                                                                                    |
| (51) H04M 1/215<br>H04M 1/60<br>G06Q 20/02<br>G06Q 20/20<br>G06Q 20/32<br>G06Q 20/40<br>H04M 1/725<br>(11) EP3616392<br>(21) EP17729590.4<br>(47) 07.07.2021<br>(87) US2017033492<br>01.11.2018<br>(22) 19.05.2017                                                                                               | (54) PRE-DETERMINED RESPONSES FOR<br>WIRELESS DEVICES<br>(73) Microsoft Technology Licensing, LLC<br>(72) KHAWAND, Charbel<br>(31) 210958<br>(32) 15.09.2008<br>(33) United States of America                                                                                                                          | (11) EP2689596<br>(21) EP12716270.9<br>(47) 14.07.2021<br>(87) EP2012055094<br>27.09.2012<br>(22) 22.03.2012                                                                                                                                                                      |
| (51) H04M 1/60<br>G06Q 10/10<br>H04M 1/725<br>(11) EP3255869<br>(21) EP17382294.1<br>(47) 07.07.2021<br>(22) 23.05.2017                                                                                                                                                                                          | (51) H04M 3/493<br>(11) EP3516856<br>(21) EP17851810.6<br>(47) 07.07.2021<br>(87) US2017052343<br>22.03.2018<br>(22) 19.09.2017                                                                                                                                                                                        | (54) METHOD AND APPARATUS FOR<br>ROUTING TELECOMMUNICATION<br>CONNECTIONS (TC CONNECTIONS)<br>TO A MOBILE RADIO TERMINAL<br>(73) Sigam Schindler<br>Beteiligungsgesellschaft mbH<br>(72) PAETSCH, Frank<br>BERNDT, Heiner<br>(31) 102011005972<br>(32) 23.03.2011<br>(33) Germany |
| (54) PAIRING COMPUTING DEVICES VIA<br>AUDIO COMMUNICATION CHANNELS<br>(73) Google LLC<br>(72) KHANNA, Heman<br>(31) 201762489413 P<br>(32) 24.04.2017<br>(33) United States of America                                                                                                                           | (54) SYSTEM AND METHOD FOR SECURE<br>INTERACTIVE VOICE RESPONSE<br>(73) Genesys Telecommunications<br>Laboratories, Inc.<br>(72) FRAIZER, Colin, P.<br>ULLYOT, James, R.<br>SCHOTT, III, Richard, Ray<br>MUNTEANU, Bogdan<br>URAZOV, Lachin<br>(31) 201662396649 P<br>(32) 19.09.2016<br>(33) United States of America | (51) H04M 3/56<br>G10L 17/04<br>G10L 17/22<br>(11) EP3271917<br>(21) EP16719575.9<br>(47) 14.07.2021<br>(87) US2016023000<br>29.09.2016<br>(22) 18.03.2016                                                                                                                        |
| (54) TEXT MESSAGE GENERATION<br>METHOD FOR AN ELECTRONIC<br>DEVICE IN A VEHICLE<br>(73) Seat, S.A.<br>(72) MORENO PAREJO, Alejandro<br>(31) 201630791<br>(32) 09.06.2016<br>(33) Spain                                                                                                                           | (51) H04M 3/51<br>(11) EP3402177<br>(21) EP18164715.7<br>(47) 07.07.2021<br>(22) 08.05.2009                                                                                                                                                                                                                            | (54) COMMUNICATING METADATA THAT<br>IDENTIFIES A CURRENT SPEAKER<br>(73) Microsoft Technology Licensing, LLC<br>(72) KASHTAN, Guy<br>SCHLESINGER, Benny<br>FITOUSSI, Hen<br>(31) 201514664047<br>(32) 20.03.2015<br>(33) United States of America                                 |
| (54) SIGNAL DETECTION AND BLOCKING<br>FOR VOICE PROCESSING<br>EQUIPMENT<br>(73) Semafoe Limited<br>(72) TEW, Andrew Peter William<br>JACKSON, David<br>CRITCHLEY, Timothy<br>COOPER-DRIVER, Richard Charles<br>(31) 0808448<br>0817841<br>(32) 09.05.2008<br>30.09.2008<br>(33) United Kingdom<br>United Kingdom | (51) H04M 1/60<br>H04M 19/04<br>H04M 1/725<br>(11) EP3565229<br>(21) EP18738704.8<br>(47) 14.07.2021<br>(87) KR2018000626<br>19.07.2018<br>(22) 12.01.2018                                                                                                                                                             | (51) H04M 3/56<br>G10L 21/0216<br>G10L 25/21<br>G10L 25/30<br>G10L 25/84<br>(11) EP3751831<br>(21) EP20179146.4<br>(47) 14.07.2021<br>(22) 10.06.2020                                                                                                                             |
| (54) ELECTRONIC DEVICE AND METHOD<br>FOR CONTROLLING CALL FUNCTION<br>(73) Samsung Electronics Co., Ltd.<br>(72) TRACZ, Pawel<br>GRZESIAK, Grzegorz Pawal<br>KORNATOWSKI, Lukasz Dominik<br>KOMLEV, Anton<br>JAKUBIAK, Antoni<br>(31) 20170005365<br>(32) 12.01.2017<br>(33) Korea (Republic)                    | (51) H04M 3/523<br>(11) EP3661180<br>(21) EP19211763.8<br>(47) 07.07.2021<br>(22) 27.11.2019                                                                                                                                                                                                                           | (54) AUDIO CHANNEL MIXING<br>(73) Google LLC<br>(72) Rudberg, Tore<br>Schuldt, Christian<br>(31) 201962859386 P<br>(32) 10.06.2019<br>(33) United States of America                                                                                                               |
| (51) H04M 1/64<br>H04M 1/663<br>H04M 3/42                                                                                                                                                                                                                                                                        | (54) SYSTEM AND METHOD FOR<br>PROVIDING ENHANCED ROUTING IN<br>A CONTACT CENTER<br>(73) Avaya Inc.<br>(72) SERERO, Eyal<br>NETANEL, Gal<br>BAR-YOAV, Ronen<br>NEKRASHEVICH, Roman                                                                                                                                      | (51) H04N 1/00<br>H04N 1/32<br>(11) EP3247097<br>(21) EP17168940.9<br>(47) 07.07.2021<br>(22) 02.05.2017                                                                                                                                                                          |

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| (54) PRINTING APPARATUS, METHOD OF CONTROLLING THE SAME, AND STORAGE MEDIUM                                | (32) 27.12.2016                                                                                                   | (51) H04N 5/14                                                                 |
| (73) Canon Kabushiki Kaisha                                                                                | (33) Japan                                                                                                        | H04N 5/57                                                                      |
| (72) KIMURA, Tomohiro                                                                                      | (51) H04N 1/21                                                                                                    | H04N 19/117                                                                    |
| HIRAIKE, Kou                                                                                               | H04N 5/225                                                                                                        | H04N 19/136                                                                    |
| (31) 2016101937                                                                                            | H04N 5/232                                                                                                        | H04N 19/172                                                                    |
| (32) 20.05.2016                                                                                            | (11) EP2654288                                                                                                    | H04N 19/179                                                                    |
| (33) Japan                                                                                                 | (21) EP13163758.9                                                                                                 | H04N 19/46                                                                     |
| (51) H04N 1/00                                                                                             | (47) 07.07.2021                                                                                                   | H04N 19/80                                                                     |
| H04N 1/32                                                                                                  | (22) 15.04.2013                                                                                                   | H04N 19/85                                                                     |
| H04N 1/327                                                                                                 | (54) IMAGE PROCESSING APPARATUS AND METHOD OF CAMERA                                                              | (11) EP3688978                                                                 |
| H04W 4/12                                                                                                  | (73) Samsung Electronics Co., Ltd                                                                                 | (21) EP18783353.8                                                              |
| G06Q 30/02                                                                                                 | (72) LEE, Yonggu                                                                                                  | (47) 07.07.2021                                                                |
| H04M 1/725                                                                                                 | LEE, Jinaeon                                                                                                      | (87) US2018053186                                                              |
| (11) EP3251329                                                                                             | (31) 20120039076                                                                                                  | 04.04.2019                                                                     |
| (21) EP16833444.9                                                                                          | 20130005222                                                                                                       | (22) 27.09.2018                                                                |
| (47) 07.07.2021                                                                                            | (32) 16.04.2012                                                                                                   | (54) FRAME-RATE-CONVERSION METADATA                                            |
| (87) US2016032552                                                                                          | 17.01.2013                                                                                                        | (73) Dolby Laboratories Licensing Corporation                                  |
| 09.02.2017                                                                                                 | (33) Korea (Republic)                                                                                             | (72) PYTLARZ, Jaclyn Anne                                                      |
| (22) 13.05.2016                                                                                            | Korea (Republic)                                                                                                  | ATKINS, Robin                                                                  |
| (54) PROCESSING A FAX TRANSMISSION USING A MOBILE DEVICE                                                   | (51) H04N 1/54                                                                                                    | PIERI, Elizabeth G.                                                            |
| (73) J2 Global IP Limited                                                                                  | (11) EP3409494                                                                                                    | CHAPIRO, Alexandre                                                             |
| (72) LEHAVI, Yehoshua                                                                                      | (21) EP18174104.2                                                                                                 | DALY, Scott                                                                    |
| FREEMAN, Kirk                                                                                              | (47) 07.07.2021                                                                                                   | (31) 201762564500 P                                                            |
| MEZA, Luis, Garcia                                                                                         | (22) 24.05.2018                                                                                                   | 17200106                                                                       |
| (31) 201514816669                                                                                          | (54) METHOD OF RELIEF PRINTING AND A RELIEF PRINTER AND A SOFTWARE PRODUCT                                        | 201862648795 P                                                                 |
| (32) 03.08.2015                                                                                            | (73) Canon Production Printing Holding B.V.                                                                       | (32) 28.09.2017                                                                |
| (33) United States of America                                                                              | (72) WEIJKAMP, Clemens T.                                                                                         | 06.11.2017                                                                     |
| (51) H04N 1/00                                                                                             | GERRITS, Antonius M.                                                                                              | 27.03.2018                                                                     |
| H04N 1/333                                                                                                 | (31) 17173740                                                                                                     | (33) United States of America                                                  |
| H04W 72/10                                                                                                 | (32) 31.05.2017                                                                                                   | European Patent Office (EPO)                                                   |
| (11) EP3300346                                                                                             | (33) European Patent Office (EPO)                                                                                 | United States of America                                                       |
| (21) EP17191828.7                                                                                          | (51) H04N 1/60                                                                                                    | (51) H04N 5/225                                                                |
| (47) 14.07.2021                                                                                            | (11) EP3435651                                                                                                    | G03B 3/10                                                                      |
| (22) 19.09.2017                                                                                            | (21) EP18186052.9                                                                                                 | G03B 5/02                                                                      |
| (54) IMAGE FORMING APPARATUS, PROGRAM, AND IMAGE FORMING SYSTEM                                            | (47) 14.07.2021                                                                                                   | G03B 9/06                                                                      |
| (73) Konica Minolta, Inc.                                                                                  | (22) 27.07.2018                                                                                                   | (11) EP3333628                                                                 |
| (72) TORIGOSHI, Akihiro                                                                                    | (54) INFORMATION PROCESSING DEVICE, PROGRAM, AND CONTROL METHOD OF AN INFORMATION PROCESSING DEVICE               | (21) EP17205978.4                                                              |
| HASE, Junichi                                                                                              | (73) Seiko Epson Corporation                                                                                      | (47) 07.07.2021                                                                |
| MINAMI, Takeshi                                                                                            | (72) EZOE, Takashi                                                                                                | (22) 07.12.2017                                                                |
| NAKAJIMA, Tomoaki                                                                                          | (31) 2017146086                                                                                                   | (54) CAMERA DEVICE INCLUDING APERTURE AND ELECTRONIC DEVICE INCLUDING THE SAME |
| MISHIMA, Nobuhiro                                                                                          | (32) 28.07.2017                                                                                                   | (73) Samsung Electronics Co., Ltd.                                             |
| TANAKA, Yuji                                                                                               | (33) Japan                                                                                                        | (72) Lee, Kyung Bae                                                            |
| NAKANO, Daisuke                                                                                            | (51) H04N 5/00                                                                                                    | (31) 20160166856                                                               |
| (31) 2016184112                                                                                            | H04N 5/445                                                                                                        | (32) 08.12.2016                                                                |
| (32) 21.09.2016                                                                                            | H04N 7/173                                                                                                        | (33) Korea (Republic)                                                          |
| (33) Japan                                                                                                 | (11) EP2436185                                                                                                    | (51) H04N 5/225                                                                |
| (51) H04N 1/00                                                                                             | (21) EP10725242.1                                                                                                 | G03B 13/32                                                                     |
| H04N 5/222                                                                                                 | (47) 14.07.2021                                                                                                   | G03B 17/08                                                                     |
| H04N 5/77                                                                                                  | (87) GB2010000996                                                                                                 | (11) EP3179307                                                                 |
| G03B 17/02                                                                                                 | 02.12.2010                                                                                                        | (21) EP15829948.7                                                              |
| (11) EP3565233                                                                                             | (22) 17.05.2010                                                                                                   | (47) 07.07.2021                                                                |
| (21) EP17885587.0                                                                                          | (54) SYSTEMS AND METHODS FOR ACCESSING ELECTRONIC PROGRAM GUIDE INFORMATION OVER A BACKCHANNEL COMMUNICATION PATH | (87) KR2015007908                                                              |
| (47) 07.07.2021                                                                                            | (73) DISH Technologies L.L.C.                                                                                     | 11.02.2016                                                                     |
| (87) JP2017045462                                                                                          | (72) MOUNTAIN, Dale                                                                                               | (22) 29.07.2015                                                                |
| 05.07.2018                                                                                                 | (31) 473619                                                                                                       | (54) CAMERA MODULE                                                             |
| (22) 19.12.2017                                                                                            | (32) 28.05.2009                                                                                                   | (73) LG Innotek Co., Ltd.                                                      |
| (54) CAMERA, CAMERA PROCESSING METHOD, SERVER, SERVER PROCESSING METHOD, AND INFORMATION PROCESSING DEVICE | (33) United States of America                                                                                     | (72) PARK, Seung Ryong                                                         |
| (73) Sony Corporation                                                                                      |                                                                                                                   | (31) 20140099600                                                               |
| (72) SOMEYA, Takahisa                                                                                      |                                                                                                                   | (32) 04.08.2014                                                                |
| (31) 2016252381                                                                                            |                                                                                                                   | (33) Korea (Republic)                                                          |
|                                                                                                            |                                                                                                                   | (51) H04N 5/232                                                                |
|                                                                                                            |                                                                                                                   | (11) EP3611915                                                                 |
|                                                                                                            |                                                                                                                   | (21) EP19192226.9                                                              |
|                                                                                                            |                                                                                                                   | (47) 07.07.2021                                                                |
|                                                                                                            |                                                                                                                   | (22) 19.08.2019                                                                |

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|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) METHOD AND APPARATUS FOR<br>IMAGE PROCESSING                                                      | (72) POSCH, Christoph<br>MATOLIN, Daniel                                                                              | (32) 07.02.2014<br>17.03.2014<br>06.11.2014<br>12.12.2014                                                                                                             |
| (73) GUANGDONG OPPO MOBILE<br>TELECOMMUNICATIONS CORP., LTD.                                           | (31) 17306740<br>(32) 11.12.2017<br>(33) European Patent Office (EPO)                                                 | (33) United States of America<br>United States of America<br>United States of America<br>United States of America                                                     |
| (72) LIU, Yaoyong<br>CHEN, Yan                                                                         | (51) H04N 5/345<br>H04N 5/347<br>B60R 1/00<br>H04N 5/232<br>H04N 7/18                                                 | (51) H04N 5/367<br>H04N 5/369<br>H04N 17/00<br>H04N 19/00<br>H04N 19/46<br>H04N 19/59<br>H04N 19/65                                                                   |
| (31) 201810942727<br>(32) 17.08.2018<br>(33) China                                                     | (11) EP3607740<br>(21) EP17832468.7<br>(47) 07.07.2021<br>(87) DE2017200134<br>11.10.2018                             | (11) EP3528493<br>(21) EP16918906.5<br>(47) 14.07.2021<br>(87) KR2016012155<br>19.04.2018                                                                             |
| (51) H04N 5/232<br>H04N 5/235                                                                          | (22) 11.12.2017<br>(54) CAMERA DEVICE AND METHOD FOR<br>DETECTING AN AREA OUTSIDE A<br>VEHICLE                        | (22) 27.10.2016<br>(54) DEFECTIVE PIXEL INFORMATION<br>RECORDING DEVICE, AND<br>DEFECTIVE PIXEL CORRECTION<br>DEVICE AND METHOD                                       |
| (11) EP3179711<br>(21) EP16202972.2<br>(47) 07.07.2021<br>(22) 08.12.2016                              | (73) Conti Temic microelectronic GmbH<br>(72) BREUER, Karsten<br>(31) 102017205630<br>(32) 03.04.2017<br>(33) Germany | (73) Hanwha Techwin Co., Ltd.<br>(72) LEE, Chang Min<br>(31) 20160133599<br>(32) 14.10.2016<br>(33) Korea (Republic)                                                  |
| (54) METHOD AND APPARATUS FOR<br>PREVENTING PHOTOGRAPH FROM<br>BEING SHIELDED                          | (51) H04N 5/353<br>G06T 3/40<br>H04N 5/33<br>H04N 9/04                                                                | (51) H04N 5/367<br>H04N 5/374<br>G01N 21/64<br>G01N 21/95<br>G06T 7/00                                                                                                |
| (73) Xiaomi Inc.<br>(72) PAN, Long<br>WANG, Guangjian<br>ZHU, Ruixian                                  | (11) EP3582490<br>(21) EP18750832.0<br>(47) 07.07.2021<br>(87) CN2018074093<br>16.08.2018                             | (11) EP3298390<br>(21) EP16890862.2<br>(47) 07.07.2021<br>(87) US2016029821<br>24.08.2017                                                                             |
| (31) 201510897800<br>(32) 08.12.2015<br>(33) China                                                     | (22) 25.01.2018<br>(54) IMAGE FUSION APPARATUS AND<br>IMAGE FUSION METHOD                                             | (22) 28.04.2016<br>(54) MICRO PHOTOLUMINESCENCE<br>IMAGING WITH OPTICAL FILTERING                                                                                     |
| (51) H04N 5/232<br>H04N 5/235<br>H04N 5/238                                                            | (73) Hangzhou Hikvision Digital Technology<br>Co., Ltd.<br>(72) FAN, Meng<br>YU, Hai<br>PU, Shiliang                  | (73) Semilab SDI LLC<br>(72) KISS, Zoltan Tamas<br>DUDAS, Laszlo<br>KOVACS, Zsolt<br>LAJTOS, Imre<br>NADUDVARI, Gyorgy<br>LAURENT, Nicolas<br>JASTRZEBSKI, Lubomir L. |
| (11) EP3522523<br>(21) EP19154177.0<br>(47) 14.07.2021<br>(22) 29.01.2019                              | (31) 201710074203<br>(32) 10.02.2017<br>(33) China                                                                    | (31) 201514703692<br>201514879522<br>(32) 04.05.2015<br>09.10.2015                                                                                                    |
| (54) IMAGE CAPTURE APPARATUS AND<br>FOCUSING ADJUSTMENT METHOD<br>FOR SAME                             | (51) H04N 5/355<br>H04N 5/357<br>H04N 5/365<br>H04N 5/376<br>H04N 5/378<br>H01L 27/146                                | (33) United States of America<br>United States of America                                                                                                             |
| (73) CANON KABUSHIKI KAISHA<br>(72) SUGAYA, Atsuto<br>(31) 2018016476<br>(32) 01.02.2018<br>(33) Japan | (11) EP3103255<br>(21) EP15708933.5<br>(47) 07.07.2021<br>(87) US2015014912<br>13.08.2015                             | (51) H04N 5/369<br>G01J 1/02<br>H01L 27/146<br>H01L 31/10                                                                                                             |
| (51) H04N 5/232<br>H04N 5/247<br>H04N 5/91                                                             | (22) 06.02.2015<br>(54) FEEDTHROUGH-COMPENSATED<br>IMAGE SENSOR                                                       | (11) EP3709362<br>(21) EP20165065.2<br>(47) 14.07.2021<br>(22) 04.08.2016                                                                                             |
| (11) EP3528490<br>(21) EP16919592.2<br>(47) 07.07.2021<br>(87) CN2016104086<br>03.05.2018              | (73) Rambus Inc.<br>(72) GUIDASH, Michael<br>ENDSLEY, Jay<br>LADD, John<br>VOGELSANG, Thomas<br>SMITH, Craig M.       | (54) GERMANIUM-SILICON LIGHT<br>SENSING METHOD                                                                                                                        |
| (22) 31.10.2016<br>(54) IMAGE DATA FRAME<br>SYNCHRONIZATION METHOD AND<br>TERMINAL                     | (31) 201461937436 P<br>201461954517 P<br>201462076011 P<br>201462091408 P                                             | (73) Artlux Inc.                                                                                                                                                      |
| (73) Huawei Technologies Co., Ltd.<br>(72) HE, Fei<br>TANG, Jianyu                                     |                                                                                                                       |                                                                                                                                                                       |
| (51) H04N 5/335<br>H04N 5/341<br>H04N 5/3745<br>H04N 5/378                                             |                                                                                                                       |                                                                                                                                                                       |
| (11) EP3725068<br>(21) EP18814922.3<br>(47) 14.07.2021<br>(87) EP2018084348<br>20.06.2019              |                                                                                                                       |                                                                                                                                                                       |
| (22) 11.12.2018<br>(54) EVENT-BASED IMAGE SENSOR AND<br>OPERATING METHOD THEREOF                       |                                                                                                                       |                                                                                                                                                                       |
| (73) Prophesee                                                                                         |                                                                                                                       |                                                                                                                                                                       |

|                               |                                    |                                  |
|-------------------------------|------------------------------------|----------------------------------|
| (72) LIU, Han-Din             | 03.01.2018                         | LIN, Chung-Chih                  |
| NA, Yun-Chung                 | 15.03.2018                         | CHU, Kuan-Chen                   |
| CHENG, Szu-Lin                | 31.03.2018                         | (31) 201762481131 P              |
| CHEN, Shu-Lu                  | (33) United States of America      | 201762485003 P                   |
| CHEN, Hui-Wen                 | United States of America           | 201762504531 P                   |
| LIANG, Che-Fu                 | United States of America           | 201762511977 P                   |
| (31) 201562200652 P           | United States of America           | 201762534179 P                   |
| 201562209349 P                | United States of America           | 201762542329 P                   |
| 201562210946 P                | United States of America           | 201762561256 P                   |
| 201562210991 P                | United States of America           | 201762561266 P                   |
| 201562211004 P                | United States of America           | 201762581777 P                   |
| 201562217031 P                | United States of America           | 201762581720 P                   |
| 201562251691 P                | (51) H04N 5/369                    | 201762596914 P                   |
| 201562271386 P                | H04N 5/232                         | 201862613054 P                   |
| (32) 04.08.2015               | (11) EP3135029                     | 201862617317 P                   |
| 25.08.2015                    | (21) EP15783036.5                  | 201815908447                     |
| 27.08.2015                    | (47) 07.07.2021                    | (32) 04.04.2017                  |
| 28.08.2015                    | (87) KR2015003926                  | 13.04.2017                       |
| 28.08.2015                    | 29.10.2015                         | 10.05.2017                       |
| 11.09.2015                    | (22) 20.04.2015                    | 27.05.2017                       |
| 06.11.2015                    | (54) IMAGING DEVICE AND            | 18.07.2017                       |
| 28.12.2015                    | PHOTOGRAPHING APPARATUS            | 08.08.2017                       |
| (33) United States of America | (73) Samsung Electronics Co., Ltd. | 21.09.2017                       |
| United States of America      | (72) SEO, Hyeong-chan              | 21.09.2017                       |
| United States of America      | (31) 20140047603                   | 05.11.2017                       |
| United States of America      | (32) 21.04.2014                    | 05.11.2017                       |
| United States of America      | (33) Korea (Republic)              | 11.12.2017                       |
| United States of America      | (51) H04N 5/369                    | 03.01.2018                       |
| United States of America      | H04N 5/3745                        | 15.01.2018                       |
| United States of America      | H01L 27/146                        | 28.02.2018                       |
| (51) H04N 5/369               | (11) EP3228077                     | (33) United States of America    |
| H01L 27/146                   | (21) EP15801029.8                  | United States of America         |
| H01L 31/10                    | (47) 14.07.2021                    | United States of America         |
| G01S 17/89                    | (87) US2015059732                  | United States of America         |
| (11) EP3610510                | 09.06.2016                         | United States of America         |
| (21) EP18783894.1             | (22) 09.11.2015                    | United States of America         |
| (47) 14.07.2021               | (54) SOLID STATE IMAGE SENSOR WITH | United States of America         |
| (87) US2018027369             | ENHANCED CHARGE CAPACITY AND       | United States of America         |
| 18.10.2018                    | DYNAMIC RANGE                      | United States of America         |
| (22) 12.04.2018               | (73) Qualcomm Incorporated         | United States of America         |
| (54) GERMANIUM-SILICON LIGHT  | (72) HSEIH, Biay-Cheng             | United States of America         |
| SENSING APPARATUS             | GOMA, Sergiu Radu                  | United States of America         |
| (73) Artilux Inc.             | (31) 201414561845                  | United States of America         |
| (72) NA, Yun-Chung            | (32) 05.12.2014                    | United States of America         |
| CHENG, Szu-Lin                | (33) United States of America      | United States of America         |
| CHEN, Shu-Lu                  | (51) H04N 5/374                    | (51) H04N 5/376                  |
| LIU, Han-Din                  | H01L 27/146                        | H01L 27/146                      |
| CHEN, Hui-Wen                 | G01S 7/486                         | (11) EP3490248                   |
| LIANG, Che-Fu                 | (11) EP3607738                     | (21) EP17843348.8                |
| LYU, Yuan-Fu                  | (21) EP18781691.3                  | (47) 14.07.2021                  |
| CHEN, Chien-Lung              | (47) 07.07.2021                    | (87) JP2017028031                |
| LIN, Chung-Chih               | (87) US2018025949                  | 01.03.2018                       |
| CHU, Kuan-Chen                | 11.10.2018                         | (22) 02.08.2017                  |
| (31) 201762485003 P           | (22) 03.04.2018                    | (54) IMAGE CAPTURING ELEMENT AND |
| 201762500457 P                | (54) HIGH-SPEED LIGHT SENSING      | IMAGE CAPTURING SYSTEM           |
| 201762504531 P                | APPARATUS                          | (73) Nikon Corporation           |
| 201762542329 P                | (73) Artilux Inc.                  | (72) JUEN, Masahiro              |
| 201762561266 P                | (72) NA, Yun-Chung                 | TAKAGI, Toru                     |
| 201762583854 P                | LIANG, Che-Fu                      | SARUWATARI, Osamu                |
| 201862613054 P                | CHEN, Shu-Lu                       | FUNAMIZU, Wataru                 |
| 201862643295 P                | CHENG, Szu-Lin                     | NAKANISHI, Sota                  |
| 201862651085 P                | LIU, Han-Din                       | (31) 2016162799                  |
| (32) 13.04.2017               | CHEN, Chien-Lung                   | (32) 23.08.2016                  |
| 02.05.2017                    | LYU, Yuan-Fu                       | (33) Japan                       |
| 10.05.2017                    | LIN, Chieh-Ting                    | (51) H04N 5/44                   |
| 08.08.2017                    | CHEN, Bo-Jiun                      | H04N 21/422                      |
| 21.09.2017                    | CHEN, Hui-Wen                      | G06F 3/01                        |
| 09.11.2017                    | CHU, Shu-Wei                       | G06F 3/0346                      |
|                               |                                    | (11) EP3677021                   |

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| (21) EP18762640.3                        | H04H 60/13                            | (72) CHORNEY, Nicholas J.        |
| (47) 07.07.2021                          | H04H 60/76                            | CARTER, Collis Quinn             |
| (87) JP2018030188                        | G06F 13/00                            | (31) 169133                      |
| 07.03.2019                               | (11) EP2755384                        | (32) 14.04.2009                  |
| (22) 13.08.2018                          | (21) EP12829741.3                     | (33) United States of America    |
| (54) IMAGE CAPTURING APPARATUS,          | (47) 14.07.2021                       | (51) H04N 13/00                  |
| IMAGE DISPLAY SYSTEM, AND                | (87) JP2012071969                     | (11) EP3681156                   |
| OPERATION METHOD                         | 14.03.2013                            | (21) EP17924248.2                |
| (73) Ricoh Company, Ltd.                 | (22) 30.08.2012                       | (47) 14.07.2021                  |
| (72) SHOHARA, Makoto                     | (54) RECEPTION DEVICE, RECEPTION      | (87) CN2017100701                |
| (31) 2017164794                          | METHOD, PROGRAM, AND                  | 14.03.2019                       |
| (32) 29.08.2017                          | INFORMATION PROCESSING SYSTEM         | (22) 06.09.2017                  |
| (33) Japan                               | (73) Saturn Licensing LLC             | (54) METHOD AND DEVICE FOR       |
| (51) H04N 5/445                          | (72) KITAZATO, Naohisa                | TRANSMITTING WIRELESS DATA       |
| H04N 7/173                               | EYER, Mark                            | (73) SZ DJI Technology Co., Ltd. |
| H04N 21/431                              | (31) 201161531360 P                   | (72) ZHU, Lei                    |
| H04N 21/433                              | (32) 06.09.2011                       | (51) H04N 13/207                 |
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| H04N 21/4788                             | (51) H04N 7/173                       | (21) EP15727885.4                |
| H04N 21/488                              | H04N 21/262                           | (47) 07.07.2021                  |
| H04N 21/658                              | H04N 21/431                           | (87) EP2015059655                |
| H04N 21/81                               | H04N 21/433                           | 05.11.2015                       |
| H04N 21/845                              | H04N 21/443                           | (22) 04.05.2015                  |
| H04L 12/58                               | H04N 21/45                            | (54) SYSTEM AND METHOD FOR       |
| (11) EP3343909                           | H04N 21/4545                          | COLLECTING COLOR INFORMATION     |
| (21) EP18155986.5                        | H04N 21/47                            | ABOUT AN OBJECT UNDERGOING A     |
| (47) 14.07.2021                          | H04N 21/472                           | 3D SCAN                          |
| (22) 06.04.2012                          | H04N 21/482                           | (73) Arges Imaging, Inc.         |
| (54) INFORMATION PROCESSING              | H04N 21/84                            | (72) VOSS, Bjoern                |
| APPARATUS AND INFORMATION                | H04N 21/8543                          | THIEL, Frank                     |
| PROCESSING METHOD                        | H04N 21/858                           | PFEIFFER, Joachim                |
| (73) Sony Interactive Entertainment Inc. | H04L 29/06                            | HARVARD, Alexei                  |
| (72) NISHIZAWA, Manabu                   | G06Q 30/08                            | LU, Jian                         |
| HAYASAKA, Takashi                        | (11) EP2092713                        | (31) 201414268201                |
| ISHIZUKA, Kensaku                        | (21) EP07824579.2                     | (32) 02.05.2014                  |
| YAMAMOTO, Hiroyuki                       | (47) 14.07.2021                       | (33) United States of America    |
| (31) 2011144891                          | (87) GB2007004357                     | (51) H04N 13/31                  |
| (32) 29.06.2011                          | 22.05.2008                            | G02B 30/26                       |
| (33) Japan                               | (22) 15.11.2007                       | (11) EP3090302                   |
| (51) H04N 7/15                           | (54) ACCESSING CONTENT                | (21) EP14836997.8                |
| H04N 19/132                              | (73) British Broadcasting Corporation | (47) 07.07.2021                  |
| H04N 19/164                              | (72) BRADBURY, Richard                | (87) DE2014100465                |
| H04N 19/167                              | AGEH, Tony                            | 09.07.2015                       |
| H04N 19/46                               | GARMESON, Gemma                       | (22) 23.12.2014                  |
| H04N 19/59                               | PEARCE, Fraser                        | (54) METHOD AND APPARATUS FOR    |
| H04N 19/85                               | BROWNING, Matthew                     | AN AUTOPARALLACTIC AND           |
| (11) EP3044956                           | GAMMON, Ben                           | AUTOSTEREOSCOPIC DISPLAY         |
| (21) EP14795711.2                        | WHITNEY, Julie                        | (73) Tzschoppe, Wolfgang         |
| (47) 14.07.2021                          | DODD, Julia                           | (72) Tzschoppe, Wolfgang         |
| (87) US2014060559                        | HOEHN, Juergen                        | (31) 102014000082                |
| 30.04.2015                               | (31) 0622823                          | 102014004821                     |
| (22) 15.10.2014                          | 0709816                               | (32) 02.01.2014                  |
| (54) CONTROLLING RESOLUTION OF           | 0714434                               | 28.03.2014                       |
| ENCODED VIDEO                            | (32) 15.11.2006                       | (33) Germany                     |
| (73) Microsoft Technology Licensing, LLC | 22.05.2007                            | Germany                          |
| (72) CARLSSON, Pontus                    | 24.07.2007                            | (51) H04N 13/327                 |
| HEMMENDORFF, Magnus                      | (33) United Kingdom                   | H04N 13/337                      |
| HOFBAUER, Konrad                         | United Kingdom                        | H04N 13/363                      |
| NIKIFOROV, Sergei                        | United Kingdom                        | H04N 13/398                      |
| ZHAO, David Yuheng                       | (51) H04N 7/52                        | (11) EP3079362                   |
| (31) 201318658                           | G09G 5/00                             | (21) EP16155506.5                |
| 201414184228                             | H04J 3/06                             | (47) 07.07.2021                  |
| (32) 22.10.2013                          | (11) EP3664323                        | (22) 12.02.2016                  |
| 19.02.2014                               | (21) EP19208032.3                     | (54) STEREOSCOPIC IMAGE DISPLAY  |
| (33) United Kingdom                      | (47) 07.07.2021                       | APPARATUS WITH REMOTELY          |
| United States of America                 | (22) 12.04.2010                       | CONTROLLED ALIGNMENT FUNCTION    |
| (51) H04N 7/173                          | (54) EMBEDDED CLOCK RECOVERY          | AND METHOD OF DISPLAYING         |
| H04H 20/93                               | (73) ATI Technologies ULC             |                                  |

|                                    |                                               |                                          |
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| STEREOSCOPIC IMAGE USING THE SAME  | H04N 19/176                                   | (51) H04N 19/117                         |
| (73) RealD Inc.                    | H04N 19/187                                   | H04N 19/136                              |
| (72) SO, Bong Jae                  | H04N 19/30                                    | H04N 19/176                              |
| KIM, Yong Kyu                      | H04N 19/46                                    | H04N 19/186                              |
| KIM, Young Suk                     | H04N 19/50                                    | H04N 19/70                               |
| (31) 20150048228                   | H04N 19/583                                   | H04N 19/82                               |
| (32) 06.04.2015                    | H04N 19/593                                   | (11) EP2984827                           |
| (33) Korea (Republic)              | (11) EP2719176                                | (21) EP14720459.8                        |
| (51) H04N 17/02                    | (21) EP12724813.6                             | (47) 14.07.2021                          |
| H04N 17/04                         | (47) 07.07.2021                               | (87) US2014032839                        |
| (11) EP2852165                     | (87) US2012038841                             | 16.10.2014                               |
| (21) EP12877073.2                  | 20.12.2012                                    | (22) 03.04.2014                          |
| (47) 07.07.2021                    | (22) 21.05.2012                               | (54) SAMPLE ADAPTIVE OFFSET SCALING      |
| (87) JP2012062769                  | (54) VISUAL DISPLAY RESOLUTION                | BASED ON BIT-DEPTH                       |
| 21.11.2013                         | PREDICTION BASED ON FUSED                     | (73) Qualcomm Incorporated               |
| (22) 18.05.2012                    | REGIONS                                       | (72) KIM, Woo-Shik                       |
| (54) METHOD FOR DISPLAYING MARKER  | (73) Dolby Laboratories Licensing Corporation | SOLE ROJALS, Joel                        |
| (73) LEADER ELECTRONICS CORP.      | (72) SU, Guan-Ming                            | JOSHI, Rajan Laxman                      |
| (72) AMINO, Yuji                   | QU, Sheng                                     | KARCZEWICZ, Marta                        |
| SAKAMOTO, Yoshihiro                | HULYALKAR, Samir N.                           | (31) 201361809852 P                      |
| (51) H04N 19/105                   | (31) 201161496453 P                           | 201414243707                             |
| H04N 19/11                         | (32) 13.06.2011                               | (32) 08.04.2013                          |
| H04N 19/117                        | (33) United States of America                 | 02.04.2014                               |
| H04N 19/157                        | (51) H04N 19/107                              | (33) United States of America            |
| H04N 19/176                        | H04N 19/166                                   | United States of America                 |
| H04N 19/82                         | H04N 19/17                                    | (51) H04N 19/117                         |
| (11) EP3595302                     | H04N 19/176                                   | H04N 19/167                              |
| (21) EP18810420.2                  | H04N 19/61                                    | H04N 19/176                              |
| (47) 14.07.2021                    | H04N 19/89                                    | H04N 19/59                               |
| (87) KR2018000226                  | (11) EP2737701                                | H04N 19/593                              |
| 06.12.2018                         | (21) EP12759586.6                             | (11) EP3272121                           |
| (22) 05.01.2018                    | (47) 14.07.2021                               | (21) EP16714142.3                        |
| (54) METHOD AND DEVICE FOR         | (87) US2012053580                             | (47) 07.07.2021                          |
| PERFORMING IMAGE DECODING          | 07.03.2013                                    | (87) US2016023157                        |
| ON BASIS OF INTRA PREDICTION IN    | (22) 02.09.2012                               | 29.09.2016                               |
| IMAGE CODING SYSTEM                | (54) VIDEO REFRESH WITH ERROR                 | (22) 18.03.2016                          |
| (73) LG Electronics Inc.           | PROPAGATION TRACKING AND                      | (54) DOWNSAMPLING PROCESS FOR            |
| (72) YOO, Sunmi                    | ERROR FEEDBACK FROM RECEIVER                  | LINEAR MODEL PREDICTION MODE             |
| LEE, Jaeho                         | (73) Microsoft Technology Licensing, LLC      | (73) Qualcomm Incorporated               |
| CHOI, Jangwon                      | (72) NILSSON, Mattias                         | (72) ZHANG, Li                           |
| SEO, Jungdong                      | VAFIN, Renat                                  | CHEN, Jianle                             |
| HEO, Jin                           | ANDERSON, Soren Vang                          | KARCZEWICZ, Marta                        |
| (31) 201762512737 P                | (31) 201115209                                | (31) 201562136344 P                      |
| (32) 31.05.2017                    | 201113274803                                  | 201615073171                             |
| (33) United States of America      | (32) 02.09.2011                               | (32) 20.03.2015                          |
| (51) H04N 19/105                   | 17.10.2011                                    | 17.03.2016                               |
| H04N 19/119                        | (33) United Kingdom                           | (33) United States of America            |
| H04N 19/96                         | United States of America                      | United States of America                 |
| (11) EP3713231                     | (51) H04N 19/117                              | (51) H04N 19/119                         |
| (21) EP20175076.7                  | H04N 19/13                                    | H04N 19/124                              |
| (47) 07.07.2021                    | H04N 19/176                                   | H04N 19/136                              |
| (22) 13.01.2011                    | H04N 19/18                                    | H04N 19/17                               |
| (54) METHOD AND APPARATUS FOR      | H04N 19/463                                   | H04N 19/172                              |
| ENCODING VIDEO AND APPARATUS       | H04N 19/467                                   | H04N 19/187                              |
| FOR DECODING VIDEO BY              | H04N 19/48                                    | H04N 19/34                               |
| CONSIDERING SKIP AND SPLIT         | H04N 19/91                                    | H04N 19/463                              |
| ORDER                              | (11) EP3490258                                | (11) EP3251351                           |
| (73) Samsung Electronics Co., Ltd. | (21) EP18185339.1                             | (21) EP16708484.7                        |
| (72) KIM, Il-Koo                   | (47) 14.07.2021                               | (47) 14.07.2021                          |
| MIN, Jung-Hye                      | (22) 06.11.2012                               | (87) US2016014677                        |
| JUNG, Hae-Kyung                    | (54) METHOD AND RECORDING MEDIUM              | 04.08.2016                               |
| LEE, Sun-Il                        | STORING CODED IMAGE DATA                      | (22) 25.01.2016                          |
| CHEON, Min-Su                      | (73) Dolby International AB                   | (54) PREDICTIVE IMAGE ENCODING AND       |
| (31) 20100003555                   | (72) HENRY, Felix                             | DECODING WITH PIXEL GROUP                |
| (32) 14.01.2010                    | CLARE, Gordon                                 | BASED QUANTIZATION                       |
| (33) Korea (Republic)              | (31) 1160109                                  | (73) Dolby International AB              |
| (51) H04N 19/105                   | (32) 07.11.2011                               | Dolby Laboratories Licensing Corporation |
|                                    | (33) France                                   | (72) SCHUEUER, Klaas Heinrich            |

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| KOWALIK, Uwe Michael               | (73) Fondation B-COM                | 01.11.2011                     |
| NEDDENS, Arion                     | (72) HENRY, Félix                   | 08.11.2011                     |
| KRAETZER, Philipp                  | (31) 1756072                        | 11.11.2011                     |
| SU, Guan-Ming                      | (32) 29.06.2017                     | (33) United States of America  |
| (31) 201562108142 P                | (33) France                         | United States of America       |
| (32) 27.01.2015                    | (51) H04N 19/152                    | United States of America       |
| (33) United States of America      | H04N 19/187                         | United States of America       |
| (51) H04N 19/119                   | H04N 19/30                          | (51) H04N 19/423               |
| H04N 19/124                        | H04N 19/463                         | H04N 19/91                     |
| H04N 19/136                        | H04N 19/70                          | (11) EP3149948                 |
| H04N 19/176                        | (11) EP2941003                      | (21) EP15729986.8              |
| H04N 19/463                        | (21) EP13867714.1                   | (47) 07.07.2021                |
| H04N 19/96                         | (47) 14.07.2021                     | (87) US2015032835              |
| (11) EP3668095                     | (87) JP2013083559                   | 03.12.2015                     |
| (21) EP20151296.9                  | 03.07.2014                          | (22) 28.05.2015                |
| (47) 07.07.2021                    | (22) 16.12.2013                     | (54) ACCELERATION OF CONTEXT   |
| (22) 12.01.2012                    | (54) IMAGE PROCESSING DEVICE AND    | ADAPTIVE BINARY ARITHMETIC     |
| (54) IMAGE CODING APPARATUS, IMAGE | METHOD                              | CODING (CABAC) IN VIDEO CODECS |
| CODING METHOD, AND PROGRAM,        | (73) Sony Corporation               | (73) ARRIS Enterprises LLC     |
| AND IMAGE DECODING APPARATUS,      | (72) SATO, Kazushi                  | (72) CHANDRASHEKAR, Padmassri  |
| IMAGE DECODING METHOD, AND         | (31) 2012283614                     | PICHUMANI, Padmagowri          |
| PROGRAM                            | 2013143977                          | KULKARNI, Vinay                |
| (73) CANON KABUSHIKI KAISHA        | 2013182993                          | RAMAMURTHY, Shailesh           |
| (72) KOBAYASHI, Masaaki            | (32) 26.12.2012                     | NELLORE, Anilkumar             |
| (31) 2011004648                    | 09.07.2013                          | GUBBI, Chetan Kumar Viswanath  |
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| (51) H04N 19/119                   | Japan                               | (33) United States of America  |
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| H04N 19/176                        | (51) H04N 19/186                    | H04N 19/593                    |
| H04N 19/70                         | H04N 19/50                          | H04N 19/93                     |
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| (47) 07.07.2021                    | (21) EP16169266.0                   | (47) 07.07.2021                |
| (87) KR2015012018                  | (47) 07.07.2021                     | (87) CN2015079566              |
| 13.10.2016                         | (22) 12.05.2016                     | 26.11.2015                     |
| (22) 09.11.2015                    | (54) A METHOD FOR ENCODING/         | (22) 22.05.2015                |
| (54) METHOD DECODING VIDEO SIGNALS | DECODING A PICTURE BLOCK            | (54) METHOD AND APPARATUS FOR  |
| (73) LG Electronics Inc.           | (73) InterDigital VC Holdings, Inc. | PALETTE TABLE PREDICTION AND   |
| (72) YOO, Sunmi                    | (72) SERRE, Catherine               | SIGNALING                      |
| HEO, Jin                           | LASSERRE, Sebastien                 | (73) HFI Innovation Inc.       |
| NAM, Junghak                       | LELEANNEC, Fabrice                  | (72) CHUANG, Tzu-Der           |
| LIM, Jaehyun                       | (31) 15305737                       | SUN, Yu-Chen                   |
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| 201562195772 P                     | (51) H04N 19/423                    | (32) 23.05.2014                |
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| 22.07.2015                         | H04N 19/573                         | (33) United States of America  |
| (33) United States of America      | H04N 19/58                          | United States of America       |
| United States of America           | H04N 19/70                          | (51) H04N 19/467               |
| (51) H04N 19/13                    | (11) EP2767090                      | H04N 19/68                     |
| H04N 19/154                        | (21) EP12839718.9                   | (11) EP3462740                 |
| H04N 19/18                         | (47) 14.07.2021                     | (21) EP18196449.5              |
| H04N 19/192                        | (87) JP2012077021                   | (47) 07.07.2021                |
| H04N 19/463                        | 18.04.2013                          | (22) 25.09.2018                |
| H04N 19/50                         | (22) 12.10.2012                     | (54) FUNCTIONAL SAFETY METHOD  |
| H04N 19/91                         | (54) TRACKING A REFERENCE PICTURE   | AND SYSTEM, CORRESPONDING      |
| (11) EP3646597                     | BASED ON A DESIGNATED PICTURE       | COMPUTER PROGRAM PRODUCT       |
| (21) EP18737155.4                  | ON AN ELECTRONIC DEVICE             | (73) STMicroelectronics S.r.l. |
| (47) 07.07.2021                    | (73) Dolby International AB         | (72) TOFANICCHIO, Mr. Giuseppe |
| (87) EP2018065563                  | (72) MISRA, Kiran                   | MARINELLI, Mr. Nicola          |
| 24.01.2019                         | DESHPANDE, Sachin G.                | (31) 201700108150              |
| (22) 12.06.2018                    | SEGALL, Christopher A.              | (32) 27.09.2017                |
| (54) METHOD FOR DECODING AN        | (31) 201113273191                   | (33) Italy                     |
| IMAGE, CODING METHOD,              | 201113287015                        | (51) H04N 21/218               |
| DEVICES, TERMINAL EQUIPMENT        | 201113291961                        | H04N 21/242                    |
| AND COMPUTER PROGRAMS              | 201113294996                        | H04N 21/4223                   |
| ASSOCIATED THEREWITH               | (32) 13.10.2011                     | H04N 21/43                     |



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| H04N 5/073                                    | (11) EP3346665                   | (47) 14.07.2021                           |
| H04N 5/232                                    | (21) EP17211225.2                | (22) 14.02.2017                           |
| H04N 5/247                                    | (47) 14.07.2021                  | (54) RECORDING DEVICE                     |
| H04N 5/77                                     | (22) 27.12.2006                  | (73) Funai Electric Co., Ltd.             |
| H04N 7/18                                     | (54) METHODS AND APPARATUS FOR   | (72) HAYASHIBARA, Kazuki                  |
| (11) EP3319313                                | INTEGRATING MEDIA ACROSS A       | FUJIMOTO, Shojiro                         |
| (21) EP17199990.7                             | WIDE AREA NETWORK                | TAKAKI, Kentaro                           |
| (47) 07.07.2021                               | (73) Rovi Solutions Corporation  | OSAKI, Mitsuharu                          |
| (22) 03.11.2017                               | (72) Dietrich, Brad              | FUJITA, Koji                              |
| (54) SYSTEM AND RELATED METHOD                | Putterman, Daniel                | (31) 2016025933                           |
| FOR SYNCHRONIZED CAPTURE                      | Peters, Gregory                  | (32) 15.02.2016                           |
| OF DATA BY MULTIPLE NETWORK-                  | Bullwinkle, Richard              | (33) Japan                                |
| CONNECTED CAPTURE DEVICES                     | (31) 318793                      | (51) H04N 21/236                          |
| (73) Karl Storz Endoscopy-America, Inc.       | (32) 27.12.2005                  | H04N 21/2385                              |
| (72) LAU, Stephen                             | (33) United States of America    | H04N 21/2389                              |
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| (32) 04.11.2016                               | H04N 21/2362                     | H04N 21/488                               |
| (33) United States of America                 | H04N 21/8358                     | H04N 21/643                               |
| (51) H04N 21/2187                             | (11) EP3412029                   | H04N 21/658                               |
| H04N 21/233                                   | (21) EP17702856.0                | H04N 21/81                                |
| H04N 21/24                                    | (47) 07.07.2021                  | H04N 21/84                                |
| H04N 21/2665                                  | (87) EP2017052077                | H04H 20/42                                |
| H04N 21/422                                   | 10.08.2017                       | H04H 20/91                                |
| H04N 21/433                                   | (22) 31.01.2017                  | (11) EP2523370                            |
| H04N 21/439                                   | (54) EMBEDDING WATERMARKING DATA | (21) EP12166737.2                         |
| H04N 21/6332                                  | (73) Nagravision S.A.            | (47) 14.07.2021                           |
| H04N 21/81                                    | (72) HUNACEK, Didier             | (22) 04.05.2012                           |
| H04N 21/84                                    | (31) 201601793                   | (54) Method and apparatus for managing    |
| H04N 21/854                                   | (32) 01.02.2016                  | broadcast data transmission resources,    |
| H04H 60/04                                    | (33) United Kingdom              | comprising allocation of content data and |
| H04H 60/54                                    | (51) H04N 21/2343                | application data related to the content   |
| H04H 60/73                                    | H04N 21/24                       | data                                      |
| H04H 60/91                                    | H04N 19/30                       | (73) Comcast Cable Communications, LLC    |
| H04H 60/92                                    | H04N 19/423                      | (72) Holden, Danial E.                    |
| G10H 1/00                                     | H04N 19/44                       | (31) 201113105009                         |
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| WITH STREAMING CAPABILITIES                   | AND BUFFER MODEL OF DATA         | (47) 07.07.2021                           |
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| Dolby International AB                        | EXTENSIONS                       | 25.06.2015                                |
| (72) CENGARLE, Giulio                         | (73) Qualcomm Incorporated       | (22) 17.12.2014                           |
| MATEOS SOLE, Antonio                          | (72) HENDRY, Fnu                 | (54) METHOD OF RESERVING A                |
| SCAINI, Davide                                | WANG, Ye-Kui                     | BANDWIDTH IN A NETWORK FOR                |
| BARKALE, Suraj Suhas                          | RAMASUBRAMONIAN, Adarsh Krishnan | THE EXECUTION OF A SERVICE ON A           |
| (31) 201730933                                | (31) 201462064414 P              | USER TERMINAL                             |
| 201762558456 P                                | 201514883256                     | (73) ORANGE                               |
| 17192421                                      | (32) 15.10.2014                  | (72) BOUVET, Eric                         |
| (32) 13.07.2017                               | 14.10.2015                       | MARCHAND, Hervé Michel                    |
| 14.09.2017                                    | (33) United States of America    | (31) 1362798                              |
| 21.09.2017                                    | United States of America         | (32) 17.12.2013                           |
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| (51) H04N 21/222                              | H04N 21/426                      | H04N 21/4402                              |
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| H04N 21/4227                                  | H04N 21/4335                     | H04N 21/84                                |
| H04N 21/436                                   | H04N 21/458                      | H04N 21/845                               |
| H04N 21/472                                   | H04N 21/482                      | H04N 21/8543                              |
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| (73) InterDigital Madison Patent Holdings,<br>SAS                        | (32) 16.05.2017               | (72) BOUWKNEGT, Dennis Erik<br>DEN BOK, Henk                         |
| (72) RUMREICH, Mark Francis                                              | 16.05.2017                    | (51) H04N 21/41                                                      |
| HORLANDER, Thomas Edward                                                 | 29.05.2017                    | H04N 21/439                                                          |
| LEFEVRE, Chad Andrew                                                     | 29.05.2017                    | H04N 21/462                                                          |
| (31) 201562218679 P                                                      | 29.05.2017                    | H04N 21/81                                                           |
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| H04L 29/06                                                               | 25.01.2018                    | (73) SYNC                                                            |
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| (87) US2017033867                                                        | Denmark                       | (33) France                                                          |
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| (54) MULTICAST AGGREGATION<br>OF MULTIPLE STREAMING<br>CONNECTIONS       | Denmark                       | H04N 21/443                                                          |
| (73) Hughes Network Systems, LLC                                         | Denmark                       | H04N 5/14                                                            |
| (72) ROY, Satyajit                                                       | Denmark                       | H04N 5/232                                                           |
| TRIPATHI, Rohit                                                          | Denmark                       | H04N 5/235                                                           |
| (31) 201615161168                                                        | United States of America      | (11) EP3329667                                                       |
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| H04N 21/414                                                              | H04N 21/422                   | 09.02.2017                                                           |
| H04N 21/422                                                              | H04N 21/436                   | (22) 08.06.2016                                                      |
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| H04N 21/436                                                              | H04N 21/472                   | (73) Qualcomm Incorporated                                           |
| H04N 21/439                                                              | H04N 21/845                   | (72) LOU, Ying Chen                                                  |
| H04N 21/442                                                              | (11) EP3220650                | VELARDE, Ruben                                                       |
| H04N 21/482                                                              | (21) EP17160249.3             | KRISHNAMURTHY SAGAR, Sanket                                          |
| H04N 21/485                                                              | (47) 14.07.2021               | DING, Hengzhou                                                       |
| H04N 21/81                                                               | (22) 10.03.2017               | LIANG, Liang                                                         |
| G06F 3/16                                                                | (54) CONTROL APPARATUS        | CHAN, Leung Chun                                                     |
| H04L 12/28                                                               | (73) Funai Electric Co., Ltd. | (31) 201514815517                                                    |
| H04S 7/00                                                                | (72) TAKEMOTO, Makoto         | (32) 31.07.2015                                                      |
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| (21) EP18197589.7                                                        | TOGE, Shinichi                | (51) H04N 21/422                                                     |
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| (22) 16.05.2018                                                          | MIYOSHI, Masatoshi            | (11) EP3599768                                                       |
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| (72) COFFMAN, Patrick L.                                                 | (33) Japan                    | (22) 24.07.2018                                                      |
| GRAHAM, David C.                                                         | (51) H04N 21/41               | (54) REMOTE CONTROLLER FOR<br>LOCKING OR UNLOCKING OF TV<br>CHANNELS |
| CIELAK, Matthew J.                                                       | H04N 21/43                    | (73) Vestel Elektronik Sanayi ve Ticaret A.S.                        |
| CARRIGAN, Taylor G.                                                      | H04N 21/431                   | (72) ÖZBAY, Mustafa Caner                                            |
| IRANI, Cyrus                                                             | H04N 21/436                   | (51) H04N 21/4223                                                    |
| ALBUQUERQUE, Fernando                                                    | H04N 21/462                   | H04N 21/431                                                          |
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| PA201770403                                                              | (11) EP3080997                | (21) EP18186104.8                                                    |
| PA201770404                                                              | (21) EP13810919.4             | (47) 07.07.2021                                                      |
| PA201770406                                                              | (47) 14.07.2021               | (22) 22.08.2012                                                      |
| PA201770408                                                              | (87) EP2013076240             | (54) COMPOSITION MANAGER CAMERA                                      |
|                                                                          | 18.06.2015                    | (73) BlackBerry Limited                                              |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (72) BELANGER, Etienne<br>NITA, Adrian<br>BOAK, Adrian<br>GRAHAM, Neil John<br>VAN REENAN, Michael Alexander                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | G06F 16/48<br>(11) EP3748517<br>(21) EP20187872.5<br>(47) 14.07.2021<br>(22) 29.06.2017                                                                                                                                                                                                                                                                                                                                         | KIM, Han-ki<br>SONG, Young-suk<br>(31) 20160146907<br>(32) 04.11.2016<br>(33) Korea (Republic)                                                                                                                                                                                                           |
| (51) H04N 21/431<br>G06T 5/00<br>G11B 27/00<br>H04N 5/20<br>H04N 5/66<br>H04N 9/68<br>H04N 9/82<br>(11) EP3684061<br>(21) EP18855339.0<br>(47) 07.07.2021<br>(87) JP2018006864<br>21.03.2019<br>(22) 26.02.2018<br>(54) VIDEO DISPLAY DEVICE AND VIDEO<br>DISPLAY METHOD<br>(73) Panasonic Intellectual Property<br>Management Co., Ltd.<br>(72) HIROTA, Takeshi<br>MIYAJIMA, Susumu<br>YONEDA, Akira<br>KASHIWAGI, Yoshiichiro<br>NISHIO, Toshiroh<br>KOZUKA, Masayuki<br>(31) 201762558092 P<br>201762580918 P<br>(32) 13.09.2017<br>02.11.2017<br>(33) United States of America<br>United States of America                   | (54) SYSTEMS AND METHODS FOR USING<br>SEEKTABLES TO STREAM MEDIA<br>ITEMS<br>(73) Spotify AB<br>(72) BAKKEN, Isak<br>OBCENA, Mark<br>NARSIMHA, Swaroop<br>PULLIAINEN, Jyrki<br>(31) 201662365904 P<br>201715489644<br>(32) 22.07.2016<br>17.04.2017<br>(33) United States of America<br>United States of America                                                                                                                | (51) H04R 1/10<br>H04R 25/00<br>(11) EP3297295<br>(21) EP17189772.1<br>(47) 07.07.2021<br>(22) 07.09.2017<br>(54) HEARING DEVICE WITH FIXATION<br>ARRANGEMENT<br>(73) Oticon A/S<br>(72) RIEMER, Lars<br>(31) 16188749<br>(32) 14.09.2016<br>(33) European Patent Office (EPO)                           |
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| (51) H04R 1/40<br>H04R 3/12<br>H04S 1/00<br>H04S 3/00<br>H04S 5/02<br>H04S 7/00                                                                                                                                                                                                                                                                                                                        | (73) ams AG<br>(72) Stojanovic, Goran<br>Steele, Colin<br>Mueller, Simon<br>Fröhlich, Thomas<br>Lous, Erik Jan<br>Singulani, Anderson                                                                                                                                                                                                                                                                                | (72) CHEN, Wanshi<br>TOKGOZ, Yeliz<br>SUN, Haitong<br>JI, Tingfang<br>(31) 201762457636 P<br>201815881342                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| (31) 201562195392 P<br>201662317713 P<br>(32) 22.07.2015<br>04.04.2016<br>(33) United States of America<br>United States of America<br>(51) H04R 19/00<br>H04R 19/04<br>(11) EP3629597<br>(21) EP18196920.5<br>(47) 07.07.2021<br>(22) 26.09.2018<br>(54) MEMS MICROPHONE ASSEMBLY AND<br>METHOD FOR FABRICATING A MEMS<br>MICROPHONE ASSEMBLY                                                         | (31) 201562195392 P<br>201662317713 P<br>(32) 22.07.2015<br>04.04.2016<br>(33) United States of America<br>United States of America<br>(51) H04W 4/06<br>H04W 16/14<br>H04W 48/12<br>H04W 48/16<br>H04W 56/00<br>(11) EP3580963<br>(21) EP18714640.2<br>(47) 14.07.2021<br>(87) US2018015616<br>16.08.2018<br>(22) 27.01.2018<br>(54) HANDLING TIME INDEXING IN LTE-NR<br>CO-EXISTENCE<br>(73) QUALCOMM Incorporated | (72) Apple Inc.<br>(72) ZHU, Yifan<br>KUMAR, Utkarsh<br>KAVURI N., Lakshmi<br>BABU, Shivani Suresh<br>SUKUMAR, Hariharan<br>KISS, Krisztian<br>(31) 201862672503 P<br>201916403699<br>(32) 16.05.2018<br>06.05.2019<br>(33) United States of America<br>United States of America<br>(51) H04W 4/40<br>(11) EP3383077<br>(21) EP18164534.2<br>(47) 14.07.2021<br>(22) 28.03.2018<br>(54) VEHICLE-MOUNTED MILLIMETER-<br>WAVE COMMUNICATION DEVICE AND<br>COMMUNICATION METHOD<br>(73) Toyota Jidosha Kabushiki Kaisha<br>(72) SAI, Seii<br>(31) 2017067770<br>(32) 30.03.2017<br>(33) Japan<br>(51) H04W 4/70<br>(11) EP3425933<br>(21) EP18192115.6<br>(47) 07.07.2021 |

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| (22) 21.11.2013                                                                             | (87) EP2018054552                                                                                                                   | (72) KEREN, Eitan                                                                                                       |
| (54) METHOD AND MOBILE TERMINAL FOR CONTROLLING BLUETOOTH LOW ENERGY DEVICE                 | 21.02.2019                                                                                                                          | (51) H04W 8/14                                                                                                          |
| (73) Samsung Electronics Co., Ltd.                                                          | (22) 23.02.2018                                                                                                                     | H04W 72/04                                                                                                              |
| (72) LEE, Ju-youn                                                                           | (54) METHOD AND DEVICE FOR NETWORK INITIATED PACKET DATA UNIT, PDU, SESSION ESTABLISHMENT IN A TELECOMMUNICATION NETWORK            | H04W 4/00                                                                                                               |
| LEE, Sang-hyup                                                                              | (73) Telefonaktiebolaget LM Ericsson (Publ)                                                                                         | (11) EP3355595                                                                                                          |
| KO, Min-jeong                                                                               | (72) CASTELLANOS ZAMORA, David                                                                                                      | (21) EP16856648.7                                                                                                       |
| KIM, Kwang-choon                                                                            | HEDMAN, Peter                                                                                                                       | (47) 14.07.2021                                                                                                         |
| SUH, Jung-won                                                                               | KELLER, Ralf                                                                                                                        | (87) CN2016087459                                                                                                       |
| SHIN, Seung-hyuck                                                                           | NAVAS CORNEJO, Angel                                                                                                                | 27.04.2017                                                                                                              |
| YOON, , Sung-jin                                                                            | (31) 201762545069 P                                                                                                                 | (22) 28.06.2016                                                                                                         |
| (31) 20120139245                                                                            | 17380021                                                                                                                            | (54) METHOD OF PERFORMING DIRECT COMMUNICATION BETWEEN STATIONS IN WIRELESS LOCAL AREA NETWORK AND ASSOCIATED EQUIPMENT |
| (32) 03.12.2012                                                                             | (32) 14.08.2017                                                                                                                     | (73) Huawei Technologies Co., Ltd.                                                                                      |
| 13.03.2013                                                                                  | 02.10.2017                                                                                                                          | (72) LIN, Yingpei                                                                                                       |
| (33) Korea (Republic)                                                                       | (33) United States of America                                                                                                       | SU, Hongjia                                                                                                             |
| Korea (Republic)                                                                            | European Patent Office (EPO)                                                                                                        | ZHU, Jun                                                                                                                |
| (51) H04W 8/00                                                                              | (51) H04W 8/08                                                                                                                      | (31) 201510685539                                                                                                       |
| H04W 48/14                                                                                  | H04W 36/08                                                                                                                          | 201510741092                                                                                                            |
| H04W 48/16                                                                                  | H04W 88/16                                                                                                                          | (32) 20.10.2015                                                                                                         |
| H04W 84/12                                                                                  | H04W 92/20                                                                                                                          | 03.11.2015                                                                                                              |
| (11) EP3178259                                                                              | H04W 76/12                                                                                                                          | (33) China                                                                                                              |
| (21) EP15830402.2                                                                           | H04W 76/15                                                                                                                          | China                                                                                                                   |
| (47) 14.07.2021                                                                             | (11) EP3622777                                                                                                                      | (51) H04W 8/18                                                                                                          |
| (87) KR2015008147                                                                           | (21) EP17726707.7                                                                                                                   | G06F 8/61                                                                                                               |
| 11.02.2016                                                                                  | (47) 07.07.2021                                                                                                                     | G06F 8/65                                                                                                               |
| (22) 04.08.2015                                                                             | (87) IB2017052827                                                                                                                   | G06F 9/445                                                                                                              |
| (54) ELECTRONIC DEVICE AND METHOD FOR CONTROLLING INFORMATION EXCHANGE IN ELECTRONIC DEVICE | 15.11.2018                                                                                                                          | (11) EP3629610                                                                                                          |
| (73) Samsung Electronics Co., Ltd.                                                          | (22) 12.05.2017                                                                                                                     | (21) EP17913334.3                                                                                                       |
| (72) JUNG, Bu-Seop                                                                          | (54) LOCAL IDENTIFIER LOCATOR NETWORK PROTOCOL (ILNP) BREAKOUT                                                                      | (47) 14.07.2021                                                                                                         |
| KANG, Ki-Seok                                                                               | (73) Telefonaktiebolaget LM Ericsson (Publ)                                                                                         | (87) CN2017094983                                                                                                       |
| CHUNG, Young-Kwan                                                                           | (72) ALLAN, David Ian                                                                                                               | 20.12.2018                                                                                                              |
| CHOI, Yong-Hae                                                                              | HALPERN, Joel                                                                                                                       | (22) 28.07.2017                                                                                                         |
| CHOI, Jong-Mu                                                                               | (51) H04W 8/12                                                                                                                      | (54) METHOD AND APPARATUS FOR MANAGING EMBEDDED UNIVERSAL INTEGRATED CIRCUIT CARD CONFIGURATION FILE                    |
| (31) 20140099889                                                                            | (11) EP3669560                                                                                                                      | (73) Huawei Technologies Co., Ltd.                                                                                      |
| (32) 04.08.2014                                                                             | (21) EP17811268.6                                                                                                                   | (72) ZHANG, Yajun                                                                                                       |
| (33) Korea (Republic)                                                                       | (47) 14.07.2021                                                                                                                     | GAO, Linyi                                                                                                              |
| (51) H04W 8/00                                                                              | (87) EP2017081298                                                                                                                   | LONG, Shuiping                                                                                                          |
| H04W 88/04                                                                                  | 21.02.2019                                                                                                                          | YU, Xiaobo                                                                                                              |
| H04W 88/08                                                                                  | 04.12.2017                                                                                                                          | (31) 201710449255                                                                                                       |
| H04W 76/10                                                                                  | (54) A METHOD OF EXECUTING A SERVICE FOR A SERVICE CONSUMER, AS WELL AS A CORRESPONDING NETWORK NODE AND A COMPUTER PROGRAM PRODUCT | (32) 14.06.2017                                                                                                         |
| (11) EP3259935                                                                              | (73) Telefonaktiebolaget LM Ericsson (PUBL)                                                                                         | (33) China                                                                                                              |
| (21) EP16752674.8                                                                           | (72) BARTOLOMÉ RODRIGO, Maria, Cruz PUENTE PESTAÑA, Miguel, Angel                                                                   | (51) H04W 8/18                                                                                                          |
| (47) 07.07.2021                                                                             | (31) 201762545038 P                                                                                                                 | H04W 12/08                                                                                                              |
| (87) KR2016001561                                                                           | (32) 14.08.2017                                                                                                                     | (11) EP2854432                                                                                                          |
| 25.08.2016                                                                                  | (33) United States of America                                                                                                       | (21) EP13794549.9                                                                                                       |
| (22) 16.02.2016                                                                             | (51) H04W 8/12                                                                                                                      | (47) 14.07.2021                                                                                                         |
| (54) METHOD FOR TRIGGERING TRANSMISSION OF USER EQUIPMENT (UE)-TO-NETWORK RELAY INDICATION  | H04W 8/26                                                                                                                           | (87) KR2013004527                                                                                                       |
| (73) Samsung Electronics Co., Ltd.                                                          | H04W 76/10                                                                                                                          | 28.11.2013                                                                                                              |
| (72) AGIWAL, Anil                                                                           | (11) EP3682655                                                                                                                      | (22) 23.05.2013                                                                                                         |
| CHANG, Young-Bin                                                                            | (21) EP17785028.6                                                                                                                   | (54) METHOD FOR CONTROL AND ENFORCEMENT OF POLICY RULE AND EUICC                                                        |
| (31) 755CH2015                                                                              | (47) 07.07.2021                                                                                                                     | (73) Samsung Electronics Co., Ltd.                                                                                      |
| 755CH2015                                                                                   | (87) IL2017051031                                                                                                                   | (72) LEE, Jin Hyoung                                                                                                    |
| (32) 16.02.2015                                                                             | 21.03.2019                                                                                                                          | JEUNG, Youn Pil                                                                                                         |
| 12.02.2016                                                                                  | (22) 13.09.2017                                                                                                                     | KIM, Sung Chul                                                                                                          |
| (33) India                                                                                  | (54) DYNAMIC MULTI IMSI WITH NATIVE APN                                                                                             | (31) 20120054822                                                                                                        |
| India                                                                                       | (73) Roamability Ltd                                                                                                                | 20120138949                                                                                                             |
| (51) H04W 8/02                                                                              |                                                                                                                                     | (32) 23.05.2012                                                                                                         |
| H04W 76/10                                                                                  |                                                                                                                                     | 03.12.2012                                                                                                              |
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| H04W 12/04                         | (54) METHOD AND APPARATUS FOR    | 15.03.2018                               |
| H04W 12/06                         | DYNAMIC DEVICE CAPABILITY        | (22) 25.07.2017                          |
| H04W 12/08                         | SIGNALING IN WIRELESS            | (54) NETWORK ACCESS                      |
| (11) EP3111689                     | COMMUNICATIONS                   | AUTHENTICATION PROCESSING                |
| (21) EP14868381.6                  | (73) QUALCOMM Incorporated       | METHOD AND DEVICE                        |
| (47) 14.07.2021                    | (72) KITAZOE, Masato             | (73) ZTE Corporation                     |
| (87) US2014068544                  | KUBOTA, Keiichi                  | (72) YOU, Shilin                         |
| 11.06.2015                         | GHEORGHIU, Valentin Alexandru    | CAI, Jiyan                               |
| (22) 04.12.2014                    | (31) 201562127474 P              | LIANG, Shuang                            |
| (54) AN EMBEDDED UNIVERSAL         | 201514788335                     | PENG, Jin                                |
| INTEGRATED CIRCUIT CARD            | (32) 03.03.2015                  | LIN, Zhaoji                              |
| SUPPORTING TWO-FACTOR              | 30.06.2015                       | ZHAO, Xiaowu                             |
| AUTHENTICATION                     | (33) United States of America    | (31) 201610821823                        |
| (73) Network-1 Technologies, Inc.  | United States of America         | (32) 12.09.2016                          |
| (72) NIX, John A.                  | (51) H04W 8/24                   | (33) China                               |
| (31) 201314099329                  | H04W 72/12                       | (51) H04W 12/06                          |
| (32) 06.12.2013                    | H04W 88/04                       | H04W 12/08                               |
| (33) United States of America      | H04W 76/14                       | (11) EP3461164                           |
| (51) H04W 8/18                     | (11) EP3429244                   | (21) EP17798573.6                        |
| H04W 84/04                         | (21) EP16903571.4                | (47) 14.07.2021                          |
| H04W 88/10                         | (47) 14.07.2021                  | (87) CN2017080189                        |
| H04W 92/20                         | (87) CN2016084810                | 23.11.2017                               |
| H04W 76/15                         | 07.12.2017                       | (22) 12.04.2017                          |
| (11) EP3198988                     | (22) 03.06.2016                  | (54) METHOD, SYSTEM AND INTELLIGENT      |
| (21) EP15844088.3                  | (54) METHOD AND DEVICE FOR RELAY | TERMINAL FOR PAIRING BETWEEN             |
| (47) 14.07.2021                    | TRANSMISSION                     | INTELLIGENT WEARABLE DEVICE              |
| (87) KR2015010053                  | (73) GUANGDONG OPPO MOBILE       | AND INTELLIGENT TERMINAL                 |
| 31.03.2016                         | TELECOMMUNICATIONS CORP., LTD.   | (73) Advanced New Technologies Co., Ltd. |
| (22) 24.09.2015                    | (72) TANG, Hai                   | (72) WANG, Xiaochen                      |
| (54) METHOD AND APPARATUS FOR      | (51) H04W 8/26                   | HUANG, Mian                              |
| SUPPORTING MULTI-RADIO ACCESS      | H04W 52/02                       | SUN, Yuanbo                              |
| TECHNOLOGY                         | H04W 84/12                       | MENG, Fei                                |
| (73) Samsung Electronics Co., Ltd. | (11) EP3644656                   | LI, Xiaofeng                             |
| (72) RYOO, Sunheui                 | (21) EP18846823.5                | (31) 201610322257                        |
| BAE, Beomsik                       | (47) 14.07.2021                  | (32) 16.05.2016                          |
| KIM, Daegyun                       | (87) KR2018009445                | (33) China                               |
| ROH, Wonil                         | 21.02.2019                       | (51) H04W 12/08                          |
| CHEUN, Kyungwhoon                  | (22) 17.08.2018                  | (11) EP3614714                           |
| JUNG, Jungsoo                      | (54) METHOD FOR TRANSMITTING OR  | (21) EP17907540.3                        |
| (31) 201462055888 P                | RECEIVING FRAME IN WIRELESS LAN  | (47) 07.07.2021                          |
| 20150019911                        | AND DEVICE THEREFOR              | (87) CN2017082534                        |
| (32) 26.09.2014                    | (73) LG Electronics Inc.         | 01.11.2018                               |
| 10.02.2015                         | (72) KIM, Jeongki                | (22) 28.04.2017                          |
| (33) United States of America      | KIM, Suhwook                     | (54) METHOD FOR ACQUIRING CONTEXT        |
| Korea (Republic)                   | RYU, Kiseon                      | CONFIGURATION INFORMATION,               |
| (51) H04W 8/22                     | SONG, Taewon                     | TERMINAL DEVICE AND ACCESS               |
| H04W 8/26                          | CHOI, Jinsoo                     | NETWORK DEVICE                           |
| H04W 80/02                         | (31) 201762546561 P              | (73) GUANGDONG OPPO MOBILE               |
| H04W 76/11                         | 201762547896 P                   | TELECOMMUNICATIONS CORP., LTD.           |
| (11) EP3672302                     | 201762581013 P                   | (72) LIU, Jianhua                        |
| (21) EP17924666.5                  | 201762582812 P                   | YANG, Ning                               |
| (47) 07.07.2021                    | 201762595103 P                   | (51) H04W 16/14                          |
| (87) CN2017100950                  | (32) 17.08.2017                  | H04W 16/28                               |
| 14.03.2019                         | 21.08.2017                       | H04W 56/00                               |
| (22) 07.09.2017                    | 02.11.2017                       | H04W 74/00                               |
| (54) DATA TRANSMISSION METHOD AND  | 07.11.2017                       | H04W 74/08                               |
| TERMINAL DEVICE                    | 06.12.2017                       | (11) EP3522625                           |
| (73) GUANGDONG OPPO MOBILE         | (33) United States of America    | (21) EP19165659.4                        |
| TELECOMMUNICATIONS CORP., LTD.     | United States of America         | (47) 07.07.2021                          |
| (72) TANG, Hai                     | United States of America         | (22) 06.11.2014                          |
| (51) H04W 8/22                     | United States of America         | (54) WIRELESS COMMUNICATIONS             |
| H04W 72/04                         | United States of America         | SYSTEM, BASE STATION, TERMINAL,          |
| (11) EP3266262                     | (51) H04W 12/02                  | AND PROCESSING METHOD                    |
| (21) EP16707364.2                  | H04W 12/069                      | (73) FUJITSU LIMITED                     |
| (47) 14.07.2021                    | (11) EP3512229                   | (72) SHIMOMURA, Tsuyoshi                 |
| (87) US2016018962                  | (21) EP17848014.1                | TANAKA, Yoshinori                        |

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| (51) H04W 16/14<br>H04W 24/02<br>H04W 28/02                              | H04W 56/00<br>H04W 74/00<br>H04W 74/08                                                 | (54) RELAY DEVICE, MOBILE<br>COMMUNICATION SYSTEM, AND<br>RELAY METHOD                                             |
| (11) EP3186997                                                           | (11) EP3369285                                                                         | (73) Softbank Corp.                                                                                                |
| (21) EP15829165.8                                                        | (21) EP16794448.7                                                                      | (72) TAKAGI, Jumpei                                                                                                |
| (47) 07.07.2021                                                          | (47) 07.07.2021                                                                        | NANRI, Masahiko                                                                                                    |
| (87) IB2015055497                                                        | (87) SE2016051056                                                                      | YOSHIMURA, Takayuki                                                                                                |
| 11.02.2016                                                               | 04.05.2017                                                                             | NOMACHI, Masanori                                                                                                  |
| (22) 20.07.2015                                                          | (22) 28.10.2016                                                                        | TAKII, Takanori                                                                                                    |
| (54) SIGNALING ARRANGEMENT FOR<br>WIRELESS SYSTEM                        | (54) TWO-STEP CONTENTION-BASED<br>RANDOM ACCESS OVER RADIO<br>RESOURCES IN LAA         | (31) 2016155529                                                                                                    |
| (73) Nokia Technologies Oy                                               | (73) Telefonaktiebolaget LM Ericsson (PUBL)                                            | (32) 08.08.2016                                                                                                    |
| (72) LUNTTILA, Timo                                                      | (72) SAHLIN, Henrik                                                                    | (33) Japan                                                                                                         |
| HUGL, Klaus                                                              | MUKHERJEE, Amitav                                                                      | (51) H04W 16/28                                                                                                    |
| TIROLA, Esa                                                              | (31) 201562248892 P                                                                    | H04B 7/04                                                                                                          |
| HOOLI, Kari                                                              | (32) 30.10.2015                                                                        | (11) EP3020144                                                                                                     |
| (31) 201414451613                                                        | (33) United States of America                                                          | (21) EP14822994.1                                                                                                  |
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| H04W 28/16                                                               | (21) EP16902644.0                                                                      | (54) METHOD AND APPARATUS FOR<br>TRANSMITTING AND RECEIVING<br>DATA IN A COMMUNICATION SYSTEM<br>USING BEAMFORMING |
| H04W 72/04                                                               | (47) 07.07.2021                                                                        | (73) Samsung Electronics Co., Ltd.                                                                                 |
| (11) EP3235289                                                           | (87) CN2016083002                                                                      | (72) YU, Hyun-Kyu                                                                                                  |
| (21) EP15700367.4                                                        | 30.11.2017                                                                             | KIM, Jae-Won                                                                                                       |
| (47) 07.07.2021                                                          | (22) 23.05.2016                                                                        | PARK, Jeong-Ho                                                                                                     |
| (87) EP2015050430                                                        | (54) DATA TRANSMISSION METHODS                                                         | JEONG, Su-Ryong                                                                                                    |
| 21.07.2016                                                               | (73) Huawei Technologies Co., Ltd.                                                     | JEONG, Cheol                                                                                                       |
| (22) 12.01.2015                                                          | (72) LI, Xiaocui                                                                       | (31) 20130079561                                                                                                   |
| (54) FIRST AND SECOND NETWORK<br>NODES AND METHODS THEREOF               | XU, Kai                                                                                | (32) 08.07.2013                                                                                                    |
| (73) Huawei Technologies Co., Ltd.                                       | (51) H04W 16/14                                                                        | (33) Korea (Republic)                                                                                              |
| (72) SOLDATI, Pablo                                                      | H04W 74/08                                                                             | (51) H04W 16/28                                                                                                    |
| KOUDOURIDIS, George                                                      | (11) EP3549381                                                                         | H04W 36/06                                                                                                         |
| (51) H04W 16/14                                                          | (21) EP16923017.4                                                                      | H04W 76/15                                                                                                         |
| H04W 28/18                                                               | (47) 07.07.2021                                                                        | (11) EP3295516                                                                                                     |
| H04W 72/04                                                               | (87) CN2016108202                                                                      | (21) EP15723188.7                                                                                                  |
| (11) EP3562191                                                           | 07.06.2018                                                                             | (47) 14.07.2021                                                                                                    |
| (21) EP18744710.7                                                        | (22) 01.12.2016                                                                        | (87) EP2015060173                                                                                                  |
| (47) 14.07.2021                                                          | (54) METHOD FOR CHANNEL ACCESS<br>AND RELATED NETWORK NODE                             | 17.11.2016                                                                                                         |
| (87) CN2018073439                                                        | (73) Telefonaktiebolaget LM Ericsson (publ)                                            | (22) 08.05.2015                                                                                                    |
| 02.08.2018                                                               | (72) LI, Gen                                                                           | (54) BEAMFORMING CONTROL BASED ON<br>MONITORING OF MULTIPLE BEAMS                                                  |
| (22) 19.01.2018                                                          | ANSARI, Junaid                                                                         | (73) Sony Group Corporation                                                                                        |
| (54) DATA MULTIPLEXING AND DATA<br>PARSING METHOD, DEVICE, AND<br>SYSTEM | (51) H04W 16/20                                                                        | (72) LARSSON, Bo                                                                                                   |
| (73) Huawei Technologies Co., Ltd.                                       | (11) EP3367721                                                                         | YING, Zhinong                                                                                                      |
| (72) XIANG, Gao                                                          | (21) EP17157408.0                                                                      | BENGTSOON, Erik                                                                                                    |
| CHEN, Lei                                                                | (47) 14.07.2021                                                                        | (51) H04W 24/00                                                                                                    |
| (31) 201710061366                                                        | (22) 22.02.2017                                                                        | H04W 48/12                                                                                                         |
| (32) 25.01.2017                                                          | (54) METHOD FOR DETERMINING<br>DEPLOYMENT PARAMETERS OF<br>CUSTOMER PREMISES EQUIPMENT | H04W 48/20                                                                                                         |
| (33) China                                                               | (73) Liberty Global Europe Holding B.V.                                                | (11) EP3342213                                                                                                     |
| (51) H04W 16/14                                                          | (72) Joyce, Peter Howard                                                               | (21) EP16791577.6                                                                                                  |
| H04W 28/26                                                               | Haggarty, Sarah Louise                                                                 | (47) 14.07.2021                                                                                                    |
| H04W 72/12                                                               | Dobson, Richard Mark                                                                   | (87) EP2016076651                                                                                                  |
| (11) EP3534639                                                           | Drury, Adrian John Jolyon                                                              | 18.05.2017                                                                                                         |
| (21) EP16924110.6                                                        | (51) H04W 16/26                                                                        | (22) 04.11.2016                                                                                                    |
| (47) 07.07.2021                                                          | H04W 36/08                                                                             | (54) OPERATION OF MTC-DEVICES IN<br>ENHANCED COVERAGE MODE                                                         |
| (87) CN2016110143                                                        | H04W 40/22                                                                             | (73) THALES DIS AIS Deutschland GmbH                                                                               |
| 21.06.2018                                                               | (11) EP3499962                                                                         | (72) BREUER, Volker                                                                                                |
| (22) 15.12.2016                                                          | (21) EP17839022.5                                                                      | WEHMEIER, Lars                                                                                                     |
| (54) INFORMATION TRANSMISSION<br>METHOD AND TERMINAL APPARATUS           | (47) 07.07.2021                                                                        | (31) 15193582                                                                                                      |
| (73) GUANGDONG OPPO MOBILE<br>TELECOMMUNICATIONS CORP., LTD.             | (87) JP2017020115                                                                      | (32) 09.11.2015                                                                                                    |
| (72) YANG, Ning                                                          | 15.02.2018                                                                             | (33) European Patent Office (EPO)                                                                                  |
| LIN, Yanan                                                               | (22) 30.05.2017                                                                        | (51) H04W 24/00                                                                                                    |
| (51) H04W 16/14                                                          |                                                                                        | H04W 52/02                                                                                                         |
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| H04W 76/28                          | (22) 30.08.2017                          | (87) CN2016108284                      |
| (11) EP3624481                      | (54) WIRELESS COMMUNICATION SYSTEM       | 07.06.2018                             |
| (21) EP17932213.6                   | AND WIRELESS COMMUNICATION               | (22) 01.12.2016                        |
| (47) 07.07.2021                     | METHOD                                   | (54) MEASUREMENT METHOD, TERMINAL      |
| (87) CN2017111686                   | (73) Nippon Telegraph And Telephone      | DEVICE AND NETWORK DEVICE              |
| 23.05.2019                          | Corporation                              | (73) GUANGDONG OPPO MOBILE             |
| (22) 17.11.2017                     | (72) SHINOHARA, Shoko                    | TELECOMMUNICATIONS CORP., LTD.         |
| (54) METHOD FOR LISTENING TO PDCCH, | INOUE, Yasuhiko                          | (72) YANG, Ning                        |
| AND TERMINAL DEVICE                 | IWATANI, Junichi                         | (51) H04W 24/10                        |
| (73) GUANGDONG OPPO MOBILE          | MIZOGUCHI, Masato                        | (11) EP3637836                         |
| TELECOMMUNICATIONS CORP., LTD.      | (31) 2016172079                          | (21) EP17928721.4                      |
| (72) TANG, Hai                      | (32) 02.09.2016                          | (47) 07.07.2021                        |
| (51) H04W 24/02                     | (33) Japan                               | (87) CN2017106097                      |
| (11) EP3614716                      | (51) H04W 24/06                          | 18.04.2019                             |
| (21) EP19201634.3                   | H04W 28/26                               | (22) 13.10.2017                        |
| (47) 14.07.2021                     | (11) EP3531739                           | (54) DATA TRANSMISSION METHOD,         |
| (22) 04.12.2013                     | (21) EP18158102.6                        | TERMINAL DEVICE, AND NETWORK           |
| (54) MANAGING HETEROGENEOUS         | (47) 14.07.2021                          | DEVICE                                 |
| CELLULAR NETWORKS                   | (22) 22.02.2018                          | (73) GUANGDONG OPPO MOBILE             |
| (73) Intucell Ltd.                  | (54) TESTING THE RESOURCE                | TELECOMMUNICATIONS CORP., LTD.         |
| (72) Nuss, Ziv                      | RESERVATION BEHAVIOR OF AT               | (72) YANG, Ning                        |
| Mizrahi, Itay Meir                  | LEAST A FIRST DEVICE UNDER TEST          | ZHANG, Zhi                             |
| (31) 201213693434                   | IN AN EMULATED DEVICE-TO-DEVICE          | (51) H04W 24/10                        |
| (32) 04.12.2012                     | NETWORK ENVIRONMENT                      | H04B 17/24                             |
| (33) United States of America       | (73) Rohde & Schwarz GmbH & Co. KG       | H04B 17/29                             |
| (51) H04W 24/02                     | (72) KANG, Woo Seok                      | H04B 17/309                            |
| H04W 24/10                          | HUR, Yong Suk                            | H04B 17/373                            |
| H04W 36/00                          | (51) H04W 24/08                          | (11) EP3553975                         |
| H04W 36/12                          | H04W 56/00                               | (21) EP18738957.2                      |
| H04W 36/14                          | H04W 72/04                               | (47) 14.07.2021                        |
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| H04W 84/12                          | (87) CN2018083400                        | (54) METHOD AND APPARATUS FOR          |
| H04W 88/06                          | 20.12.2018                               | PERFORMING DRIVE TEST IN MOBILE        |
| (11) EP3306974                      | (22) 17.04.2018                          | COMMUNICATION SYSTEM                   |
| (21) EP16800295.4                   | (54) RADIO LINK MONITORING METHOD        | (73) Samsung Electronics Co., Ltd.     |
| (47) 14.07.2021                     | AND APPARATUS                            | (72) PARK, Donghyuck                   |
| (87) KR2016005522                   | (73) China Academy of Telecommunications | YOON, Sungrok                          |
| 01.12.2016                          | Technology                               | JUNG, Sungkyu                          |
| (22) 25.05.2016                     | (72) DA, Ren                             | KIM, Jinwook                           |
| (54) METHOD AND DEVICE FOR          | REN, Bin                                 | KIM, Hyesuk                            |
| DETERMINING WHETHER OR NOT          | CHENG, Fang-Chen                         | CHO, Minsung                           |
| TERMINAL PERFORMS WLAN              | ZHAO, Zheng                              | PARK, Sungbum                          |
| MEASUREMENT                         | (31) 201710459267                        | (31) 20170006433                       |
| (73) LG Electronics Inc.            | (32) 16.06.2017                          | (32) 13.01.2017                        |
| (72) KIM, Sangwon                   | (33) China                               | (33) Korea (Republic)                  |
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| United States of America            | (21) EP17926233.2                        | (22) 01.02.2017                        |
| (51) H04W 24/02                     | (47) 07.07.2021                          | (54) METHOD FOR PRIORITISATION         |
| H04W 52/14                          | (87) CN2017103215                        | OF INTRA-RAT AND INTER-RAT             |
| H04W 52/24                          | 28.03.2019                               | NEIGHBOUR MEASUREMENTS                 |
| H04W 52/26                          | (22) 25.09.2017                          | (73) Telefónica Germany GmbH & Co. OHG |
| H04W 52/38                          | (54) RESOURCE CONFIGURATION              | (72) Davidovic, Sa a                   |
| H04W 72/08                          | METHOD, TERMINAL DEVICE AND              | Müllner, Robert                        |
| H04W 74/08                          | NETWORK DEVICE                           | Leth-Espensen, Mads                    |
| H04W 84/12                          | (73) GUANGDONG OPPO MOBILE               | Seitz, Alexander                       |
| H04W 88/18                          | TELECOMMUNICATIONS CORP., LTD.           | (51) H04W 24/10                        |
| H04B 17/345                         | (72) LIU, Jianhua                        | H04W 36/00                             |
| (11) EP3509363                      | YANG, Ning                               | H04W 36/08                             |
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| (47) 14.07.2021                     | (11) EP3531740                           | H04W 36/30                             |
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| (21) EP17706417.7                           | 201261598818 P                     | (22) 01.08.2016                    |
| (47) 14.07.2021                             | 201261599320 P                     | (54) METHOD AND DEVICE FOR         |
| (87) EP2017052138                           | 201213475482                       | TERMINAL PERFORMING WLAN           |
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| (22) 01.02.2017                             | 14.02.2012                         | (73) LG Electronics Inc.           |
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| LINDOFF, Bengt                              | United States of America           | (51) H04W 28/02                    |
| MOOSAVI, Reza                               | United States of America           | H04L 12/841                        |
| RAMOS, Edgar                                | (51) H04W 24/10                    | (11) EP3777308                     |
| (51) H04W 24/10                             | H04W 52/14                         | (21) EP19712213.8                  |
| H04W 36/00                                  | H04W 52/36                         | (47) 07.07.2021                    |
| H04W 36/24                                  | H04W 52/38                         | (87) EP2019057456                  |
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| NETWORK AND IN A MOBILE                     | CONTROLLING UPLINK POWER IN        | 1854305                            |
| TERMINAL OF A CELLULAR                      | WIRELESS COMMUNICATION SYSTEM      | (32) 30.03.2018                    |
| NETWORK                                     | (73) Samsung Electronics Co., Ltd. | 23.05.2018                         |
| (73) Telefónica Germany GmbH & Co. OHG      | (72) RYOO, Sun-Heui                | (33) France                        |
| (72) Leth-Espensen, Mads                    | JUNG, Jung-Soo                     | France                             |
| Widder, Dr. Wolfgang                        | KANG, Hyun-Jeong                   | (51) H04W 28/02                    |
| Müllner, Robert                             | KWUN, Jong-Hyung                   | H04W 28/16                         |
| (51) H04W 24/10                             | LEE, Sung-Jin                      | (11) EP3582544                     |
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| (22) 25.01.2017                             | (11) EP2804416                     | (73) Huawei Technologies Co., Ltd. |
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| CHA, Hwajin                                 | (54) METHOD AND APPARATUS FOR      | (31) 201710314208                  |
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| (32) 25.01.2016                             | (73) Samsung Electronics Co., Ltd. | (33) China                         |
| (33) Korea (Republic)                       | (72) KIM, Sang Bum                 | (51) H04W 28/02                    |
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| H04W 48/16                                  | JEONG, Kyeong In                   | (11) EP3625987                     |
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| (87) US2012038716                           | 21.05.2012                         | (73) LG Electronics Inc.           |
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| (54) APPARATUS AND METHODS FOR              | United States of America           | XU, Jian                           |
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| CHAUDHARY, Madhusudan                       | (47) 14.07.2021                    | H04W 48/06                         |

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| (54) COMMUNICATION DEVICE AND               | 23.03.2017                          | KIM, Min Jung                               |
| METHOD THEREIN FOR HANDLING                 | 21.07.2017                          | (31) 20170148419                            |
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| (72) ÅSTRÖM, Magnus                         | (51) H04W 28/02                     | H04W 48/18                                  |
| AXMON, Joakim                               | H04W 92/20                          | (11) EP3718345                              |
| LINDOFF, Bengt                              | H04L 12/891                         | (21) EP17817685.5                           |
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| (11) EP3451733                              | TO TRANSMIT DATA IN NEW RADIO       | (51) H04W 28/16                             |
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| (54) DATA TRANSMISSION METHOD               | LI, Qi                              | 07.12.2017                                  |
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| SYSTEM, AND APPARATUS USING                 | 201611154531                        | METHOD AND DEVICE                           |
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| (72) KIM, Seokjung                          | (32) 30.09.2016                     | (51) H04W 28/26                             |
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| (47) 14.07.2021                             | H04W 28/08                          | COMMUNICATIONS NETWORK                      |
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| (22) 03.08.2017                             | (11) EP3484202                      | MOE, Johan                                  |
| (54) METHOD AND APPARATUS FOR               | (21) EP18200877.1                   | GUNNARSSON, Fredrik                         |
| SCHEDULING UPLINK DATA IN                   | (47) 07.07.2021                     | (51) H04W 36/00                             |
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| (72) MOON, Jungmin                          |                                     |                                             |

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| (72) LI, Bingzhao                        | (87) SE2017050314                           | (51) H04W 36/00                             |
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| CAO, Zhenzhen                            | (22) 31.03.2017                             | H04W 76/10                                  |
| WANG, Xuelong                            | (54) RADIO-NETWORK NODE, WIRELESS           | (11) EP3525545                              |
| (31) 201710314136                        | DEVICE AND METHODS PERFORMED                | (21) EP17858594.9                           |
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| H04W 36/08                               | ANDERSSON, Håkan                            | (22) 03.08.2017                             |
| H04W 92/20                               | FURUSKOG, Johan                             | (54) METHODS FOR SELECTING SESSION          |
| (11) EP3611968                           | FRENNE, Mattias                             | AND SERVICE CONTINUITY MODE                 |
| (21) EP18784817.1                        | WIBERG, Niclas                              | IN A WIRELESS COMMUNICATION                 |
| (47) 14.07.2021                          | (31) 201662319313 P                         | SYSTEM                                      |
| (87) JP2018010254                        | (32) 07.04.2016                             | (73) LG Electronics Inc.                    |
| 18.10.2018                               | (33) United States of America               | (72) YOUN, Myungjune                        |
| (22) 15.03.2018                          | (51) H04W 36/00                             | KIM, Hyunsook                               |
| (54) BASE STATION AND METHOD             | H04W 36/22                                  | RYU, Jinsook                                |
| (73) NEC Corporation                     | H04W 36/30                                  | (31) 201662405259 P                         |
| (72) TAMURA, Tomu                        | H04W 36/38                                  | (32) 07.10.2016                             |
| KAKURA, Yoshikazu                        | (11) EP3632155                              | (33) United States of America               |
| FUTAKI, Hisashi                          | (21) EP17728288.6                           | (51) H04W 36/00                             |
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| (51) H04W 36/00                          | (22) 30.05.2017                             | (21) EP17154185.7                           |
| H04W 36/12                               | (54) CELL RE-SELECTION PROCEDURE            | (47) 14.07.2021                             |
| (11) EP3346760                           | ASSISTANCE AND DEVICES                      | (22) 01.02.2017                             |
| (21) EP18150246.9                        | THEREFORE                                   | (54) METHOD FOR PRIORITISATION              |
| (47) 07.07.2021                          | (73) Telefonaktiebolaget LM Ericsson (Publ) | OF INTRA-RAT AND INTER-RAT                  |
| (22) 03.01.2018                          | (72) PETTERSSON, Emil                       | NEIGHBOUR MEASUREMENTS BY                   |
| (54) DEVICES AND METHODS FOR             | ANDERSSON, Jonas                            | MEANS OF DELAYED SEQUENTIAL                 |
| HANDLING A NEW RADIO                     | PALM, Niclas                                | ADDITION OF NEIGHBOURS TO THE               |
| CONNECTION IN INTER-SYSTEM               | (51) H04W 36/00                             | MEASUREMENT CONFIGURATION                   |
| MOBILITY                                 | H04W 36/38                                  | (73) Telefónica Germany GmbH & Co. OHG      |
| (73) HTC Corporation                     | (11) EP3711357                              | (72) Davidovic, Sasa                        |
| (72) WU, Chih-Hsiang                     | (21) EP18800345.3                           | Müllner, Robert                             |
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| 201762442384 P                           | (87) SE2018051094                           | Seitz, Alexander                            |
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| United States of America                 | BEING A NR CELL INCLUDING A                 | (21) EP20159591.5                           |
| (51) H04W 36/00                          | FIRST UPLINK (UL) CARRIER BEING A           | (47) 14.07.2021                             |
| H04W 36/12                               | NR UL CARRIER AND A SECOND UL               | (22) 04.02.2016                             |
| H04W 76/22                               | CARRIER BEING A SUPPLEMENTARY               | (54) A WIRELESS DEVICE AND METHOD           |
| (11) EP3641363                           | (SUL) CARRIER                               | PERFORMED THEREBY FOR                       |
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| (22) 30.05.2018                          | (32) 15.11.2017                             | Lundevall, Magnus                           |
| (54) METHOD AND APPARATUS FOR            | (33) United States of America               | Vikberg, Jari                               |
| INSERTING A SMF ENTITY                   | (51) H04W 36/00                             | (51) H04W 36/14                             |
| (73) China Academy of Telecommunications | H04W 76/15                                  | (11) EP3703421                              |
| Technology                               | (11) EP3442267                              | (21) EP20159117.9                           |
| (72) WANG, Hucheng                       | (21) EP18188527.8                           | (47) 07.07.2021                             |
| (31) 201710438960                        | (47) 07.07.2021                             | (22) 24.02.2020                             |
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| (32) 12.06.2017                          | (54) NETWORK FOR HANDLING A BEARER          | PUBLIC WARNING SYSTEM ON                    |
| 02.01.2018                               | CHANGE IN DUAL CONNECTIVITY                 |                                             |

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| UNLICENSED FREQUENCY IN A WIRELESS COMMUNICATION SYSTEM                                          | (11) EP3397007                                                                                                            | (54) SYSTEM INFORMATION TRANSMISSION METHODS AND TERMINAL                                                           |
| (73) LG Electronics Inc.                                                                         | (21) EP17753374.2                                                                                                         | (73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.                                                           |
| (72) KIM, Sangwon                                                                                | (47) 14.07.2021                                                                                                           | (72) ZHANG, Zhi                                                                                                     |
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| (32) 28.02.2019                                                                                  | (54) METHOD AND APPARATUS FOR MINIMIZING INTERRUPTION TIME OF DATA TRANSFER ON HANDOVER IN WIRELESS COMMUNICATION NETWORK | (51) H04W 48/10                                                                                                     |
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| Korea (Republic)                                                                                 | (73) Samsung Electronics Co., Ltd.                                                                                        | (11) EP3611943                                                                                                      |
| Korea (Republic)                                                                                 | (72) JANG, Chulhee                                                                                                        | (21) EP18793794.1                                                                                                   |
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| (51) H04W 36/14                                                                                  | KIM, Eunyong                                                                                                              | (87) CN2018085535                                                                                                   |
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| H04W 84/12                                                                                       | (32) 19.02.2016                                                                                                           | (54) METHOD AND APPARATUS FOR ACQUIRING SYSTEM INFORMATION                                                          |
| (11) EP3114879                                                                                   | (33) Korea (Republic)                                                                                                     | (73) Huawei Technologies Co., Ltd.                                                                                  |
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| (47) 14.07.2021                                                                                  | H04W 48/12                                                                                                                | LIU, Yalin                                                                                                          |
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| (54) METHODS AND DEVICES FOR IMPROVING ACCESS STEERING BETWEEN RADIO ACCESS NETWORKS             | (11) EP3499944                                                                                                            | (51) H04W 48/12                                                                                                     |
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| (72) LINDHEIMER, Christofer                                                                      | (47) 07.07.2021                                                                                                           | (21) EP17785053.4                                                                                                   |
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| TEYEB, Oumer                                                                                     | 15.02.2018                                                                                                                | (87) SE2017050966                                                                                                   |
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| (33) United States of America                                                                    | (73) Softbank Corp.                                                                                                       | (54) METHODS, NETWORK NODE AND WIRELESS DEVICE FOR COMMUNICATING AND OBTAINING SYSTEM INFORMATION IN A FEMBS SYSTEM |
| (51) H04W 36/14                                                                                  | (72) NANRI, Masahiko                                                                                                      | (73) Telefonaktiebolaget LM Ericsson (publ)                                                                         |
| H04W 36/22                                                                                       | YOSHIMURA, Takayuki                                                                                                       | (72) BERGQVIST, Jens                                                                                                |
| H04W 36/32                                                                                       | NOMACHI, Masanori                                                                                                         | BERGMAN, Johan                                                                                                      |
| H04W 48/08                                                                                       | TAKII, Takanori                                                                                                           | MÄÄTTÄNEN, Helka-Liina                                                                                              |
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| (54) METHOD, DEVICE AND SYSTEM FOR SELECTING ACCESS NETWORK TYPE                                 | Japan                                                                                                                     | H04W 52/02                                                                                                          |
| (73) Huawei Technologies Co., Ltd.                                                               | (51) H04W 48/08                                                                                                           | (11) EP3030001                                                                                                      |
| (72) YANG, Jiao                                                                                  | H04W 48/18                                                                                                                | (21) EP14831197.0                                                                                                   |
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| (51) H04W 36/14                                                                                  | 08.09.2017                                                                                                                | (54) TRANSMITTING AND RECEIVING A DISCOVERY SIGNAL OF A BASE STATION IN A MOBILE COMMUNICATION SYSTEM               |
| H04W 76/18                                                                                       | (22) 29.02.2016                                                                                                           | (73) Samsung Electronics Co., Ltd.                                                                                  |
| (11) EP3700258                                                                                   | (54) METHOD, APPARATUS AND WIRELESS COMMUNICATION SYSTEM FOR DETERMINING CONTROL PLANE NODE                               | (72) KIM, Jae-Won                                                                                                   |
| (21) EP17929414.5                                                                                | (73) Huawei Technologies Co., Ltd.                                                                                        | YU, Hyun-Kyu                                                                                                        |
| (47) 07.07.2021                                                                                  | (72) WANG, Yuan                                                                                                           | JEONG, Su-Ryong                                                                                                     |
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| (54) METHOD AND APPARATUS FOR PROCESSING LINK ESTABLISHMENT FAILURE, AND COMPUTER STORAGE MEDIUM | H04W 74/08                                                                                                                |                                                                                                                     |
| (73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.                                        | (11) EP3592051                                                                                                            | (51) H04W 48/12                                                                                                     |
| (72) LIU, Jianhua                                                                                | (21) EP17902412.0                                                                                                         | H04W 74/00                                                                                                          |
| (51) H04W 36/18                                                                                  | (47) 07.07.2021                                                                                                           | H04W 74/08                                                                                                          |
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| (54) CONFIGURING TRANSMISSION<br>POWER OF A TRANSMISSION          | (22) 25.01.2016                                         | (54) MESSAGE TRANSMISSION WITH<br>REDUCED INTERFERENCE         |
| (73) Telefonaktiebolaget LM Ericsson (PUBL)                       | (54) METHOD AND DEVICE FOR<br>CONTROLLING DETACHMENT OF | (73) Telefonaktiebolaget LM Ericsson (publ)                    |
| (72) TAYAMON, Soma                                                | MOBILE TERMINAL                                         | (72) DI MARCO, Piergiuseppe                                    |
| DEL CARPIO VEGA, Luis Felipe                                      | (73) GUANGDONG OPPO MOBILE                              | KRONANDER, Jonas                                               |
| SHEN, Wei                                                         | TELECOMMUNICATIONS CORP., LTD.                          | (51) H04W 72/02                                                |
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| (72) BORG, Andreas                                                | (73) HUAWEI TECHNOLOGIES CO., LTD.                      | CHEN, Wanshi                                                   |
| HENRIKSSON, Daniel                                                | (72) ZHANG, Yi                                          | RICO ALVARINO, Alberto                                         |
| (51) H04W 56/00                                                   | (31) 201410478353                                       | WANG, Renqiu                                                   |
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| (73) QUALCOMM Incorporated                                        | 18.10.2012                                              | (33) United States of America                                  |
| (72) DAMNJANOVIC, Aleksandar                                      | (22) 13.04.2011                                         | United States of America                                       |
| VAJAPPEYAM, Madhavan Srinivasan                                   | (54) POSITIONING IN A CELLULAR                          | (51) H04W 72/02                                                |
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| LUO, Tao                                                          | (72) SHI, Liang                                         | H04W 76/19                                                     |
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| WEI, YONGBIN                                                      | LI, Linjiang                                            | (21) EP19175317.7                                              |
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| (33) United States of America                                     | H04W 88/02                                              | (72) Petria, Silviu Petrut                                     |
| United States of America                                          | (11) EP3619988                                          | Nica, Elvis Gabriel                                            |
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| (54) BEAM-SCAN TIME INDICATOR                                     | PAGING PROCEDURES IN NEW                                | (11) EP3427506                                                 |
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| (72) AXNÄS, Johan                                                 | (73) IDAC Holdings, Inc.                                | (47) 07.07.2021                                                |
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| L. J. DA SILVA, Icaro                                             | (32) 03.05.2017                                         | COMMUNICATION CHANNEL                                          |
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| (32) 28.10.2015                                                   | United States of America                                | CHANG, Han-Kuang                                               |
| (33) United States of America                                     | (51) H04W 72/02                                         | CHANG, Chen-Chung                                              |
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| (11) EP3361794                                                    | (11) EP3718352                                          | ARA, Angelino                                                  |
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|                                                                                     |                                                                                            |                                                                                                                             |
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| UPLINK TRANSMISSION IN WIRELESS COMMUNICATION SYSTEM AND A DEVICE THEREFOR          | (54) IMPROVED SCHEDULED TRANSMISSION                                                       | (54) TERMINAL DEVICE, INFRASTRUCTURE EQUIPMENT AND METHODS                                                                  |
| (73) LG Electronics Inc.                                                            | (73) Telefonaktiebolaget LM Ericsson (publ)                                                | (73) Sony Corporation                                                                                                       |
| (72) YI, Seungjune                                                                  | (72) SUNDMAN, Dennis                                                                       | Sony Mobile Communications, Inc.                                                                                            |
| LEE, Sunyoung                                                                       | DEL CARPIO VEGA, Luis, Felipe                                                              | (72) MARTIN, Brian, Alexander                                                                                               |
| (31) 201662289109 P                                                                 | LOPEZ, Miguel                                                                              | BERGGREN, Anders                                                                                                            |
| (32) 29.01.2016                                                                     | WANG, Yu                                                                                   | (31) 16155580                                                                                                               |
| (33) United States of America                                                       | (51) H04W 74/00                                                                            | (32) 12.02.2016                                                                                                             |
| (51) H04W 72/12                                                                     | H04W 74/08                                                                                 | (33) European Patent Office (EPO)                                                                                           |
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| (21) EP17889821.9                                                                   | (47) 07.07.2021                                                                            | (21) EP19194915.5                                                                                                           |
| (47) 07.07.2021                                                                     | (22) 13.09.2017                                                                            | (47) 14.07.2021                                                                                                             |
| (87) CN2017070633                                                                   | (54) SELF-CONTAINED COMMUNICATION WITH COORDINATION SIGNALING FOR LISTEN-AFTER-TALK SCHEME | (22) 03.04.2015                                                                                                             |
| 12.07.2018                                                                          | (73) Telefonaktiebolaget LM Ericsson (publ)                                                | (54) METHOD FOR TRANSMITTING AN EXPLICIT SIGNAL OF LAYER-2 STATE VARIABLES FOR D2D COMMUNICATION SYSTEM AND DEVICE THEREFOR |
| (22) 09.01.2017                                                                     | (72) Li, Gen                                                                               | (73) LG ELECTRONICS INC.                                                                                                    |
| (54) METHOD AND DEVICE FOR MULTIPLEXING UPLINK AUTHORIZATION RESOURCES              | Ansari, Junaid                                                                             | (72) YI, Seungjune                                                                                                          |
| (73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.                           | (51) H04W 74/08                                                                            | LEE, Sunyoung                                                                                                               |
| (72) YANG, Ning                                                                     | (11) EP3557938                                                                             | (31) 201461982354 P                                                                                                         |
| LIU, JianHua                                                                        | (21) EP17889876.3                                                                          | (32) 22.04.2014                                                                                                             |
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| H04W 76/10                                                                          | (22) 05.01.2017                                                                            | (21) EP18804701.3                                                                                                           |
| (11) EP3301989                                                                      | (54) METHOD AND DEVICE FOR RANDOM ACCESS                                                   | (47) 07.07.2021                                                                                                             |
| (21) EP16201525.9                                                                   | (73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.                                  | (87) IB2018058341                                                                                                           |
| (47) 14.07.2021                                                                     | (72) LIU, JianHua                                                                          | 23.05.2019                                                                                                                  |
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| (54) WIRELESS COMMUNICATION SYSTEM OF SMART CYCLING EQUIPMENT AND METHOD USING SAME | YANG, Ning                                                                                 | (54) HANDLING OF PDCP DURING CONNECTION RE-ESTABLISHMENT                                                                    |
| (73) Shenzhen Qianhai Livali Technology Co., Ltd.                                   | (51) H04W 74/08                                                                            | (73) Telefonaktiebolaget LM Ericsson (publ.)                                                                                |
| (72) Zheng, Bo                                                                      | (11) EP3634074                                                                             | (72) TEYEB, Oumer                                                                                                           |
| Ye, Yongzheng                                                                       | (21) EP18911143.8                                                                          | MILDH, Gunnar                                                                                                               |
| Yu, Kai                                                                             | (47) 07.07.2021                                                                            | (31) 201762586348 P                                                                                                         |
| Lin, Yong                                                                           | (87) CN2018080044                                                                          | (32) 15.11.2017                                                                                                             |
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| (51) H04W 72/14                                                                     | (73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.                                  | (21) EP18170861.1                                                                                                           |
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| (54) TRANSMISSION OF SCHEDULING ASSIGNMENTS IN MULTIPLE OPERATING BANDWIDTHS        | (47) 14.07.2021                                                                            | (72) WU, Chih-Hsiang                                                                                                        |
| (73) Samsung Electronics Co., Ltd                                                   | (87) EP2018053076                                                                          | (31) 201762501760 P                                                                                                         |
| (72) Cho, Joon-Young                                                                | 16.08.2018                                                                                 | (32) 05.05.2017                                                                                                             |
| Han, Jin-Kyu                                                                        | (22) 07.02.2018                                                                            | (33) United States of America                                                                                               |
| Papasakellariou, Aris                                                               | (54) MEDIA ACCESS CONTROL                                                                  | (51) H04W 84/18                                                                                                             |
| (31) 119216 P                                                                       | (73) Sony Group Corporation                                                                | (11) EP3506719                                                                                                              |
| (32) 02.12.2008                                                                     | (72) LJUNG, Rickard                                                                        | (21) EP18191918.4                                                                                                           |
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| (21) EP18700558.2                                                                   | (11) EP3403461                                                                             | SURESH, Sandeep                                                                                                             |
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| (33) United States of America                                                         | (73) LG Electronics Inc.                                                                | (73) Mitsubishi Electric Corporation                           |
| (51) H04W 88/02                                                                       | (72) PARK, Byungkyu                                                                     | Mitsubishi Electric Home Appliance Co., Ltd.                   |
| H04W 4/02                                                                             | MOON, Hyungwook                                                                         | (72) TAKESHITA, Miyuki                                         |
| H04W 76/10                                                                            | LEE, Youngjun                                                                           | NAGAI, Takayoshi                                               |
| H04W 12/04                                                                            | (31) 20180005179                                                                        | MATSUMOTO, Sadayuki                                            |
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| (47) 14.07.2021                                                                       | (51) H05B 3/84                                                                          | KAMEOKA Kazuhiro                                               |
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| (54) METHOD FOR ESTABLISHING CONNECTION BETWEEN DEVICES                               | (47) 07.07.2021                                                                         | (51) H05B 6/10                                                 |
| (73) Samsung Electronics Co., Ltd.                                                    | (22) 18.05.2016                                                                         | (11) EP3672361                                                 |
| (72) HUH, Mi-suk                                                                      | (54) STACKED PLATE FOR WINDOW AND METHOD OF MANUFACTURING STACKED PLATE FOR WINDOW      | (21) EP18213507.9                                              |
| (31) 20150094006                                                                      | (73) AGC Inc.                                                                           | (47) 07.07.2021                                                |
| (32) 01.07.2015                                                                       | (72) Kosaka, Yoshio                                                                     | (22) 18.12.2018                                                |
| (33) Korea (Republic)                                                                 | Sase, Masayuki                                                                          | (54) HEATING DEVICE                                            |
| (51) H04W 92/10                                                                       | Shimada, Takashi                                                                        | (73) Aptiv Technologies Limited                                |
| (11) EP3554188                                                                        | (31) 2015106392                                                                         | (72) DWORAKOWSKI, Waldemar                                     |
| (21) EP16924726.9                                                                     | 2016072583                                                                              | DLUGOSZ, Rafal                                                 |
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| (54) METHOD AND DEVICE FOR CONFIGURING COMMUNICATION PARAMETER                        | (51) H05B 6/06                                                                          | (22) 18.12.2018                                                |
| (73) GUANGDONG OPPO MOBILE TELECOMMUNICATIONS CORP., LTD.                             | (11) EP3654734                                                                          | (54) HEATING DEVICE                                            |
| (72) TANG, Hai                                                                        | (21) EP19209462.1                                                                       | (73) Aptiv Technologies Limited                                |
| (51) H05B 1/02                                                                        | (47) 07.07.2021                                                                         | (72) DWORAKOWSKI, Waldemar                                     |
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| (54) ELECTRICAL HEATING MEANS FOR MOBILE APPLICATION                                  | (51) H05B 6/06                                                                          | (54) RF APPARATUS WITH ARC PREVENTION USING NON-LINEAR DEVICES |
| (73) Webasto SE                                                                       | H05B 6/12                                                                               | (73) NXP USA, Inc.                                             |
| (72) HAINZLMAIER, Christian                                                           | (11) EP3026982                                                                          | (72) LESTER, David Paul                                        |
| (31) 102015108582                                                                     | (21) EP15193676.2                                                                       | MONGIN, Lionel                                                 |
| (32) 30.05.2015                                                                       | (47) 07.07.2021                                                                         | (31) 201816228482                                              |
| (33) Germany                                                                          | (22) 09.11.2015                                                                         | (32) 20.12.2018                                                |
| (51) H05B 1/02                                                                        | (54) COOKING APPARATUS AND METHOD FOR CONTROLLING THE SAME                              | (33) United States of America                                  |
| H05B 3/68                                                                             | (73) Samsung Electronics Co., Ltd.                                                      | (51) H05B 6/64                                                 |
| (11) EP3481143                                                                        | (72) YUN, Chang Sun                                                                     | H05B 6/70                                                      |
| (21) EP17200251.1                                                                     | KANG, Dong Oh                                                                           | H05B 6/74                                                      |
| (47) 14.07.2021                                                                       | KANG, Hong-Joo                                                                          | (11) EP3419383                                                 |
| (22) 07.11.2017                                                                       | CHOI, Ji Woong                                                                          | (21) EP17753084.7                                              |
| (54) HEATING SYSTEM FOR OPERATING A HEATING ELEMENT                                   | (31) 20140166184                                                                        | (47) 07.07.2021                                                |
| (73) Vorwerk & Co. Interholding GmbH                                                  | 20150121387                                                                             | (87) JP2017004862                                              |
| (72) Spitthöver, Christoph                                                            | (32) 26.11.2014                                                                         | 24.08.2017                                                     |
| Lang, Torsten                                                                         | 28.08.2015                                                                              | (22) 10.02.2017                                                |
| (51) H05B 3/74                                                                        | (33) Korea (Republic)                                                                   | (54) MICROWAVE HEATING DEVICE                                  |
| H05B 6/12                                                                             | Korea (Republic)                                                                        | (73) Panasonic Corporation                                     |
| (11) EP3512302                                                                        | (51) H05B 6/06                                                                          | (72) YOSHINO, Koji                                             |
| (21) EP18213568.1                                                                     | H05B 6/12                                                                               | OOMORI, Yoshiharu                                              |
| (47) 07.07.2021                                                                       | (11) EP3331321                                                                          | SADAHIRA, Masafumi                                             |
| (22) 18.12.2018                                                                       | (21) EP16832795.5                                                                       | KUBO, Masayuki                                                 |
| (54) HYBRID COOKTOP HAVING IMPROVED HEAT INSULATION STRUCTURE AND HEATING PERFORMANCE | (47) 14.07.2021                                                                         | HASHIMOTO, Osamu                                               |
|                                                                                       | (87) JP2016071527                                                                       | SUGA, Ryosuke                                                  |
|                                                                                       | 09.02.2017                                                                              | (31) 2016027505                                                |
|                                                                                       | (22) 22.07.2016                                                                         | 2017001555                                                     |
|                                                                                       | (54) INDUCTION-HEATING COOKER AND CONTROL METHOD THEREFOR                               | (32) 17.02.2016                                                |
|                                                                                       |                                                                                         | 10.01.2017                                                     |
|                                                                                       |                                                                                         | (33) Japan                                                     |

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|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| Japan                                                                                                                                         | 08.06.2015                                                                                                                           | WEN, Wei                                                                                                          |
| (51) H05B 33/08                                                                                                                               | 08.06.2015                                                                                                                           | YAN, Wanghui                                                                                                      |
| (11) EP2818026                                                                                                                                | 08.06.2015                                                                                                                           | ZHENG, Tianhang                                                                                                   |
| (21) EP12773479.6                                                                                                                             | 08.06.2015                                                                                                                           | ZHOU, Zhixian                                                                                                     |
| (47) 07.07.2021                                                                                                                               | (33) China                                                                                                                           | (31) 201520390836 U                                                                                               |
| (87) US2012058947                                                                                                                             | China                                                                                                                                | 201520389892 U                                                                                                    |
| 06.06.2013                                                                                                                                    | China                                                                                                                                | 201510309709                                                                                                      |
| (22) 05.10.2012                                                                                                                               | China                                                                                                                                | 201520390860 U                                                                                                    |
| (54) LIGHTING DEVICE INCLUDING A<br>DRIVE DEVICE CONFIGURED FOR<br>DIMMING LIGHT-EMITTING DIODES<br>IN RESPONSE TO VOLTAGE AND<br>TEMPERATURE | China                                                                                                                                | 201510310386                                                                                                      |
|                                                                                                                                               | China                                                                                                                                | 201520394488 U                                                                                                    |
|                                                                                                                                               | China                                                                                                                                | 201510310390                                                                                                      |
|                                                                                                                                               | China                                                                                                                                | 201510310418                                                                                                      |
| (73) GE Lighting Solutions, LLC                                                                                                               | (51) H05B 45/20                                                                                                                      | (32) 08.06.2015                                                                                                   |
| (72) ROBERTS, Bruce, Richard                                                                                                                  | H05B 47/10                                                                                                                           | 08.06.2015                                                                                                        |
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|                                                                                                                                               | (47) 07.07.2021                                                                                                                      | 08.06.2015                                                                                                        |
| (51) H05B 45/10                                                                                                                               | (87) EP2016079847                                                                                                                    | 08.06.2015                                                                                                        |
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| H05B 47/175                                                                                                                                   | (22) 06.12.2016                                                                                                                      | (33) China                                                                                                        |
| H05B 47/19                                                                                                                                    | (54) DYNAMIC LIGHT EFFECT BASED ON<br>AN IMAGE                                                                                       | China                                                                                                             |
| (11) EP3210441                                                                                                                                | (73) Signify Holding B.V.                                                                                                            | China                                                                                                             |
| (21) EP15790606.6                                                                                                                             | (72) VAN DE SLUIS, Bartel, Marinus                                                                                                   | China                                                                                                             |
| (47) 14.07.2021                                                                                                                               | DRIESEN, Bas                                                                                                                         | China                                                                                                             |
| (87) FI2015050716                                                                                                                             | MEERBEEK, Berent, Willem                                                                                                             | China                                                                                                             |
| 28.04.2016                                                                                                                                    | (31) 15199427                                                                                                                        | China                                                                                                             |
| (22) 21.10.2015                                                                                                                               | 15200171                                                                                                                             |                                                                                                                   |
| (54) METHOD AND SYSTEM FOR<br>CONTROLLING A LIGHTING<br>NETWORK                                                                               | (32) 10.12.2015                                                                                                                      | (51) H05B 45/22                                                                                                   |
|                                                                                                                                               | 15.12.2015                                                                                                                           | (11) EP3651554                                                                                                    |
| (73) Aalto University Foundation sr                                                                                                           | (33) European Patent Office (EPO)                                                                                                    | (21) EP19206377.4                                                                                                 |
| (72) SIERLA, Seppo                                                                                                                            | European Patent Office (EPO)                                                                                                         | (47) 07.07.2021                                                                                                   |
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| (32) 21.10.2014                                                                                                                               | (51) H05B 45/20                                                                                                                      | (54) SPECIFIC COLOR GENERATION WITH<br>MULTICOLOR LED FOR PRECISE<br>COLOR BACKLIGHT ILLUMINATION<br>APPLICATIONS |
| (33) Finland                                                                                                                                  | H05B 47/105                                                                                                                          | (73) Continental Automotive GmbH                                                                                  |
|                                                                                                                                               | H05B 47/155                                                                                                                          | (72) Morales Rodriguez, Irving                                                                                    |
| (51) H05B 45/20                                                                                                                               | (11) EP3721682                                                                                                                       | Corona Franco Antonio de Jesus                                                                                    |
| (11) EP3220724                                                                                                                                | (21) EP18804646.0                                                                                                                    | Fernandez Michel Marcela                                                                                          |
| (21) EP16806802.1                                                                                                                             | (47) 14.07.2021                                                                                                                      | Richardt-Osuna, Jose Francisco                                                                                    |
| (47) 07.07.2021                                                                                                                               | (87) EP2018082621                                                                                                                    |                                                                                                                   |
| (87) CN2016085043                                                                                                                             | 13.06.2019                                                                                                                           | (31) 201816182776                                                                                                 |
| 15.12.2016                                                                                                                                    | (22) 27.11.2018                                                                                                                      | (32) 07.11.2018                                                                                                   |
| (22) 07.06.2016                                                                                                                               | (54) A LIGHTING CONTROL SYSTEM<br>FOR CONTROLLING A PLURALITY<br>OF LIGHT SOURCES BASED ON A<br>SOURCE IMAGE AND A METHOD<br>THEREOF | (33) United States of America                                                                                     |
| (54) ILLUMINATION DEVICE AND<br>CONTROL METHOD THEREFOR, AND<br>CONTROL SYSTEM                                                                |                                                                                                                                      | (51) H05B 45/37                                                                                                   |
| (73) Opplé Lighting Co., Ltd.                                                                                                                 | (73) Signify Holding B.V.                                                                                                            | H05B 45/48                                                                                                        |
| (72) HU, Yang                                                                                                                                 | (72) ENGELN, Dirk, Valentinus, René                                                                                                  | (11) EP3099139                                                                                                    |
| ZHOU, Zhixian                                                                                                                                 | (31) 17205810                                                                                                                        | (21) EP16168241.4                                                                                                 |
| WANG, Liang                                                                                                                                   | (32) 07.12.2017                                                                                                                      | (47) 07.07.2021                                                                                                   |
| WANG, Jian                                                                                                                                    | (33) European Patent Office (EPO)                                                                                                    | (22) 04.05.2016                                                                                                   |
| HE, Jie                                                                                                                                       |                                                                                                                                      | (54) EFFICIENT LIGHTING CIRCUIT FOR<br>LED ASSEMBLIES                                                             |
| WEN, Wei                                                                                                                                      | (51) H05B 45/22                                                                                                                      | (73) Signify Holding B.V.                                                                                         |
| YAN, Wanghui                                                                                                                                  | (11) EP3220723                                                                                                                       | (72) ARULANDU, Kumar                                                                                              |
| ZHENG, Tianhang                                                                                                                               | (21) EP16806801.3                                                                                                                    | LINNARTZ, Johan-Paul, Marie, Gerard                                                                               |
| BIAN, Juan                                                                                                                                    | (47) 07.07.2021                                                                                                                      | DE MOL, Eugen, Jacob                                                                                              |
| (31) 201510310436                                                                                                                             | (87) CN2016085042                                                                                                                    | MALYNA, Dmytro, Viktorovych                                                                                       |
| 201520390858 U                                                                                                                                | 15.12.2016                                                                                                                           | KAHLMAN, Henricus, Marius, Joseph,                                                                                |
| 201510309709                                                                                                                                  | (22) 07.06.2016                                                                                                                      | Maria                                                                                                             |
| 201520389892 U                                                                                                                                | (54) ILLUMINATION DEVICE AND<br>CONTROL METHOD AND CONTROL<br>SYSTEM THEREFOR                                                        | (31) 15169530                                                                                                     |
| 201510310386                                                                                                                                  |                                                                                                                                      | (32) 28.05.2015                                                                                                   |
| 201520394488 U                                                                                                                                | (73) Opplé Lighting Co., Ltd.                                                                                                        | (33) European Patent Office (EPO)                                                                                 |
| 201510310390                                                                                                                                  | (72) BIAN, Juan                                                                                                                      | (51) H05B 45/37                                                                                                   |
| 201520390836 U                                                                                                                                | HE, Jie                                                                                                                              | H05B 47/19                                                                                                        |
| (32) 08.06.2015                                                                                                                               | HU, Yang                                                                                                                             | (11) EP3466204                                                                                                    |
| 08.06.2015                                                                                                                                    | WANG, Jian                                                                                                                           | (21) EP17726235.9                                                                                                 |
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| 07.12.2017                                     | (22) 14.10.2016                            | (11) EP3291407                      |
| (22) 19.05.2017                                | (54) MOUNTING ASSEMBLY WITH A              | (21) EP16786723.3                   |
| (54) SWITCHED MODE POWER SUPPLY                | HEATSINK                                   | (47) 07.07.2021                     |
| IDENTIFICATION                                 | (73) Vitesco Technologies GmbH             | (87) KR2016004358                   |
| (73) Signify Holding B.V.                      | (72) Kotlar, Aurelian                      | 03.11.2016                          |
| (72) SHI, Liang                                | (51) H05K 1/03                             | (22) 26.04.2016                     |
| WANG, Gang                                     | H05K 1/09                                  | (54) WIRELESS POWER RECEPTION       |
| ZHAO, Wei, Hong                                | H05K 1/16                                  | APPARATUS                           |
| DONG, Peiliang                                 | H05K 3/12                                  | (73) Samsung Electronics Co., Ltd.  |
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| 16181207                                       | H05K 3/46                                  | KIM, Dong-Zo                        |
| (32) 30.05.2016                                | (11) EP3649834                             | SONG, Keum-Su                       |
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| (33) World Intellectual Property Office (WIPO) | (47) 14.07.2021                            | (32) 27.04.2015                     |
| European Patent Office (EPO)                   | (87) EP2018068022                          | (33) Korea (Republic)               |
| (51) H05B 45/38                                | 10.01.2019                                 | (51) H05K 1/18                      |
| H05B 45/395                                    | (22) 04.07.2018                            | H05K 3/00                           |
| (11) EP3305027                                 | (54) METHOD FOR PRODUCING A VIA IN         | H01L 33/60                          |
| (21) EP16728603.8                              | A CARRIER LAYER PRODUCED FROM              | H01L 33/62                          |
| (47) 14.07.2021                                | A CERAMIC AND CARRIER LAYER                | (11) EP3100310                      |
| (87) AT2016050169                              | HAVING A VIA                               | (21) EP15708697.6                   |
| 08.12.2016                                     | (73) Rogers Germany GmbH                   | (47) 07.07.2021                     |
| (22) 31.05.2016                                | (72) SCHMIDT, Karsten                      | (87) AT2015050019                   |
| (54) VEHICLE HEAD LIGHT                        | BRITTING, Stefan                           | 06.08.2015                          |
| (73) ZKW Group GmbH                            | MEYER, Andreas                             | (22) 21.01.2015                     |
| (72) WEBER, Emanuel                            | HERRMANN, Rainer                           | (54) METHOD FOR PRODUCING A CIRCUIT |
| (31) 504442015                                 | REGGER, Martin                             | BOARD                               |
| (32) 01.06.2015                                | (31) 102017114891                          | (73) AT & S Austria Technologie &   |
| (33) Austria                                   | (32) 04.07.2017                            | Systemtechnik Aktiengesellschaft    |
| (51) H05B 45/40                                | (33) Germany                               | (72) LANGER, Gregor                 |
| H05B 45/54                                     | (51) H05K 1/05                             | DAMEJ, Mario                        |
| H05B 45/58                                     | H05K 1/14                                  | LUTSCHOUNIG, Ferdinand              |
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| (54) LIGHT SOURCE CONTROL DEVICE               | (47) 07.07.2021                            | (11) EP3562282                      |
| FOR VEHICLE AND COMPUTER-                      | (22) 28.02.2012                            | (21) EP18169235.1                   |
| READABLE MEDIUM STORING A                      | (54) An electric and/or electronic circuit | (47) 07.07.2021                     |
| LIGHT SOURCE CONTROL PROGRAM                   | including a printed circuit board, a       | (22) 25.04.2018                     |
| FOR VEHICLE                                    | separate circuit board and a power         | (54) BACKPLANE                      |
| (73) TOYOTA JIDOSHA KABUSHIKI KAISHA           | connector                                  | (73) Siemens Aktiengesellschaft     |
| (72) TAKAGAKI, Tatsuya                         | (73) Electrolux Home Products Corporation  | (72) SCHIFFEL, Andre                |
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| (32) 22.03.2018                                | (72) Jeanneteau, Laurent                   | (11) EP3567994                      |
| (33) Japan                                     | Rigolle, Thibaut                           | (21) EP18199599.4                   |
| (51) H05B 47/155                               | Viroli, Alex                               | (47) 14.07.2021                     |
| H05B 47/18                                     | Fattorini, Andrea                          | (22) 10.10.2018                     |
| H05B 47/19                                     | (51) H05K 1/11                             | (54) SLIDE RAIL ASSEMBLY AND SLIDE  |
| (11) EP3590311                                 | H05K 1/18                                  | RAIL KIT THEREOF                    |
| (21) EP18712270.0                              | H05K 3/30                                  | (73) King Slide Works Co., Ltd.     |
| (47) 14.07.2021                                | H05K 3/32                                  | King Slide Technology Co., Ltd.     |
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| 07.09.2018                                     | (11) EP2809136                             | YANG, Shun-Ho                       |
| (22) 26.02.2018                                | (21) EP14169819.1                          | CHANG, Wei-Chen                     |
| (54) METHOD AND SYSTEM FOR                     | (47) 07.07.2021                            | WANG, Chun-Chiang                   |
| CONTROLLING THE SWITCHING ON                   | (22) 26.05.2014                            | (31) 107115670                      |
| OF LIGHTS                                      | (54) A method of assembling a transducer   | (32) 07.05.2018                     |
| (73) Franciosa, Marco                          | assembly                                   | (33) Taiwan, Province of China      |
| (72) Franciosa, Marco                          | (73) Sonion Nederland B.V.                 | (51) H05K 7/14                      |
| (31) 201700022336                              | (72) Bosch, Jozef Johannes Geradus         | H05K 7/20                           |
| (32) 28.02.2017                                | (31) 201370292                             | (11) EP3157316                      |
| (33) Italy                                     | (32) 29.05.2013                            | (21) EP16191599.6                   |
| (51) H05K 1/02                                 | (33) Denmark                               | (47) 14.07.2021                     |
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| (11) EP3310140                                 | H02J 50/12                                 | (54) CONTAINER DATA CENTER          |
| (21) EP16465550.8                              | H02J 50/70                                 |                                     |

(73) Cloud Network Technology Singapore PTE. LTD. ITO, Hidetoshi

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(72) MAO, TZE-CHERN  
CHANG, CHIH-HUNG  
FU, YEN-CHUN  
CHANG, YAO-TING  
WEI, CHAO-KE  
CHAN, HUNG-CHOU

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(32) 13.10.2015  
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(54) INTEGRATED POWER ELECTRONICS  
ASSEMBLY MODULE

(73) Delta Electronics, Inc.

(72) FENG, Wei-Yi  
ZHANG, Wei-Qiang  
WU, Hong-Yang

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(54) ELECTRONIC COMPONENT HOUSING  
APPARATUS AND ELECTRONIC  
DEVICE

(73) Nec Network And Sensor Systems, Ltd.

(72) MURAKAMI, Masahiro  
MASUDA, Norio

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(32) 02.12.2015  
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(21) EP18172595.3  
(47) 14.07.2021  
(22) 16.05.2018  
(54) HOT AISLE MODULES AND  
CONTAINMENT SYSTEMS

(73) Tate Access Floors, Inc.

(72) CURTIN, Daniel J.  
KENNEDY, Daniel  
MORRISON, Rachel

(31) 201715596571  
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(54) MOUNTING DEVICE

(73) FUJI Corporation  
(72) KAWAI, Hidetoshi

EP3

**Voor Nederland verleende Europese octrooien waarvoor een vertaling is ingediend conform artikel 52 (1, 6) van de Octrooiwet 1995.**

**Contains data concerning European patents granted for The Netherlands in which a translation was filed confirm Article 52 par. 1 or 6 of the Patents Act 1995.**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) A01D 34/81<br>A01D 43/10                                                                                                                                                                                                                                                                                                                                                                                                                                                             | FUJIO, Kazushige<br>WAKUI, Sadakazu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | United States of America<br>United States of America                                                                                                                                                                                                                                                                                                                                                                                     |
| (11) EP3527061<br>(21) EP18208575.3<br>(22) 27.11.2018<br>(54) AGRICULTURAL HARVESTER<br>(73) PÖTTINGER Landtechnik GmbH<br>(72) Gadermayr, Andreas<br>Bernecker, Josef<br>Lehner, Josef<br>Greifeneder, August<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 202018100913 U<br>(32) 19.02.2018<br>(33) Germany<br>(47) 05.05.2021                                                                                                                                                          | (74) J.M.H. Duyver lic.<br>(31) 2018047254<br>(32) 14.03.2018<br>(33) Japan<br>(47) 02.06.2021<br>(51) A01G 9/14<br>(11) EP1996008<br>(21) EP07711205.0<br>(22) 26.02.2007<br>(54) FILTER DEVICE AND GREENHOUSE<br>(73) Sun Orbit GmbH<br>(72) KLEINWÄCHTER, Jürgen<br>(74) dr. A. Krebs<br>(31) 776365 P<br>(32) 24.02.2006<br>(33) United States of America<br>(47) 07.04.2021                                                                                                                                                                                                                                                                                                                                                                                                                | (47) 31.03.2021<br>(51) A01G 31/06<br>(11) EP3422840<br>(21) EP16918824.0<br>(22) 15.10.2016<br>(54) HYDROPONIC CULTIVATION SYSTEM<br>(73) Fujian Sanan Sino-Science Photobiotech Co., Ltd.<br>(72) ZHAN, Zhuo<br>LI, Zhiyin<br>LU, Zhen<br>CHEN, Ying<br>(74) ir. W.J.J.M. Kempes<br>(47) 02.06.2021                                                                                                                                    |
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|                                      |                                           |                                    |
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| (73) Lactocorder AG                  | (54) HUMANIZED DIPEPTIDYL PEPTIDASE       | (21) EP14726026.9                  |
| (72) HOEFELMAYR, Tilman              | IV (DPP4) ANIMALS                         | (22) 14.03.2014                    |
| (74) ir. M.F.J.M. Ketelaars c.s.     | (73) Regeneron Pharmaceuticals, Inc.      | (54) PERFUSION APPARATUS WITH      |
| (31) 102017214337                    | (72) KYRATSOUS, Christos                  | A GLUCOSE SENSOR FOR               |
| (32) 17.08.2017                      | MUJICA, Alexander                         | DETERMINING VIABILITY OF AN        |
| (33) Germany                         | (74) ir. M.F.J.M. Ketelaars c.s.          | ORGAN OR TISSUE                    |
| (47) 28.04.2021                      | (31) 201462005476 P                       | (73) Lifeline Scientific, Inc.     |
| (51) A01J 27/04                      | 201462051626 P                            | (72) KRAVITZ, David C.             |
| (11) EP3585150                       | 201462072692 P                            | MAYER, Steven L.                   |
| (21) EP18709256.4                    | (32) 30.05.2014                           | MAYER, Tracy H.                    |
| (22) 27.02.2018                      | 17.09.2014                                | (74) ir. A. Blokland c.s.          |
| (54) A DEVICE FOR AND A METHOD OF    | 30.10.2014                                | (31) 201313838066                  |
| CUTTING CHEESE                       | (33) United States of America             | (32) 15.03.2013                    |
| (73) Primodan A/S                    | United States of America                  | (33) United States of America      |
| (72) GOTTHELF, Finn Bang             | United States of America                  | (47) 21.04.2021                    |
| HENRIKSEN, Lars                      | (47) 14.04.2021                           | (51) A01N 1/02                     |
| HENRIKSEN, Jørgen                    | (51) A01K 67/033                          | A61B 17/122                        |
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| (32) 27.02.2017                      | (22) 07.08.2017                           | (22) 12.04.2012                    |
| (33) Denmark                         | (54) TECHNOLOGICAL LINE FOR REARING       | (54) PERFUSION CLAMP               |
| (47) 14.04.2021                      | OR BREEDING OF INSECTS,                   | (73) Lifeline Scientific, Inc.     |
| (51) A01K 1/03                       | MODULAR SYSTEM OF SUCH                    | (72) KRAVITZ, David                |
| A01K 7/00                            | TECHNOLOGICAL LINES, METHOD               | STEINMAN, Christopher              |
| A01K 7/06                            | AND USE THEREOF                           | PETTINATO, David                   |
| A01K 39/02                           | (73) HiProMine S.A.                       | (74) ir. A. Blokland c.s.          |
| F16K 31/00                           | (72) URBANSKI, Jakub                      | (31) 201113097898                  |
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| (22) 17.03.2014                      | (74) ir. J.H. de Hoog                     | (47) 26.05.2021                    |
| (54) FLUID DELIVERY VALVE SYSTEM AND | (31) 41824416                             | (51) A01N 25/30                    |
| METHOD                               | (32) 09.08.2016                           | A01N 37/02                         |
| (73) Hydropac, LLC                   | (33) Poland                               | A01N 37/06                         |
| (72) GABRIEL, George S.              | (47) 07.04.2021                           | A01P 13/00                         |
| CAMPBELL, Neil E.                    | (51) A01K 73/02                           | (11) EP3661365                     |
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| IRWIN, Lynn B.                       | A01K 79/02                                | (22) 31.07.2018                    |
| ELDRETH, Edward K.                   | (11) EP3355692                            | (54) HERBICIDAL COMPOSITIONS BASED |
| (74) ir. M.F.J.M. Ketelaars c.s.     | (21) EP15781596.0                         | ON NONANOIC ACID AND NONENOIC      |
| (31) 201313836187                    | (22) 29.09.2015                           | ACID                               |
| (32) 15.03.2013                      | (54) A TRAWL AND A METHOD FOR             | (73) Novamont S.p.A.               |
| (33) United States of America        | FISHING                                   | (72) SAGLIANO, Angela              |
| (47) 05.05.2021                      | (73) Acoustic Fishing ApS                 | (74) J.M.H. Duyver lic.            |
| (51) A01K 29/00                      | (72) MÜLLER, Jan Allan                    | (31) 201700088474                  |
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| (54) MONITORING DEVICE, RESPECTIVE   | HANSEN, Høgne                             | (51) A01N 43/16                    |
| METHOD PERFORMED THEREBY             | (74) ir. W.J.J.M. Kempes                  | A01N 43/18                         |
| AND COMPUTER PROGRAM FOR             | (47) 28.04.2021                           | A01N 61/00                         |
| MONITORING ANIMALS                   | (51) A01M 1/02                            | A61P 35/00                         |
| (73) DeLaval Holding AB              | A01N 59/04                                | (11) EP3563683                     |
| (72) FLENNERT, Thomas                | A01N 63/00                                | (21) EP19161431.2                  |
| KVIST, Anders                        | (11) EP3116308                            | (22) 09.03.2015                    |
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| (74) dr. W.A.H.M. Van Borm           | (22) 12.03.2015                           | AND NECK CANCER                    |
| (31) 1750088                         | (54) SYSTEM FOR ATTRACTING FLYING         | (73) Cornell University            |
| (32) 03.02.2017                      | INSECTS AND ARACHNIDS                     | (72) GUDAS, Lorraine J             |
| (33) Sweden                          | (73) Biocare Gesellschaft für Biologische | TANG, Xiao-Han                     |
| (47) 19.05.2021                      | Schutzmittel mbH                          | OSEI-SARFO, Kwame                  |
| (51) A01K 67/027                     | (72) PATEL, Anant                         | URVALEK, Alison                    |
| A61P 3/10                            | (74) ir. M.F.J.M. Ketelaars c.s.          | GUDAS, Lorraine J                  |
| A61P 31/12                           | (31) 102014103268                         | (74) J.M.H. Duyver lic.            |
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| A61P 35/00                           | A01N 47/12                               | (54) SYSTEM FOR FORMING           |
| (11) EP3253208                       | A01N 47/18                               | HAMBURGERS                        |
| (21) EP16747066.5                    | A01N 53/00                               | (73) Marel France                 |
| (22) 01.02.2016                      | A01P 7/00                                | (72) LE PAIH, Jacques             |
| (54) COMBINATION THERAPIES FOR USE   | A61K 31/42                               | PIERRE, Yohann                    |
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| CANCER                               | (21) EP18205103.7                        | GRILL, Jean Noël                  |
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| (72) GOLD, Daniel P.                 | FELINES                                  | (31) 1560316                      |
| QUINTELA-FANDINO, Miguel             | (73) Intervet International B.V.         | (32) 28.10.2015                   |
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| (33) United States of America        | WILLIAMS, Heike                          | A61K 8/73                         |
| (47) 05.05.2021                      | ZOLLER, Hartmut                          | A61Q 19/00                        |
| (51) A01N 43/58                      | MITA, Takeshi                            | C08L 1/04                         |
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| C07D 409/14                          | European Patent Office (EPO)             | METHOD FOR MAKING, AND USES       |
| C07D 413/12                          | United States of America                 | (73) DuPont Nutrition USA, Inc.   |
| C07D 417/12                          | (47) 12.05.2021                          | (72) TAN, Zheng                   |
| C07D 471/04                          | (51) A21C 5/00                           | LYNCH, Maurice Gerard             |
| C07D 487/04                          | G01G 11/08                               | SESTRICK, Michael                 |
| C07D 513/04                          | G01G 17/02                               | YARANOSSIAN, Nadia                |
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| SALT, AND HERBICIDE CONTAINING IT    | ARRANGING SYSTEM                         | (47) 21.04.2021                   |
| (73) Ishihara Sangyo Kaisha, Ltd.    | (73) Rheon Automatic Machinery Co., Ltd. | (51) A23F 5/08                    |
| (72) UEKI Toshihiko                  | (72) Ueno, Hiroshi                       | A23F 5/26                         |
| YAMADA Ryu                           | (74) dr. ir. G.J.C. Verdijk c.s.         | A23N 12/08                        |
| TANAKA Hisaki                        | (31) 2016226914                          | A47J 31/52                        |
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| (51) A01N 43/80                      | A21D 8/08                                | COFFEE BLENDING AND BREWING       |
| (11) EP3082806                       | (11) EP3595452                           | SYSTEM                            |
| (21) EP14816243.1                    | (21) EP18711414.5                        | (73) Fain, Gerald S.              |
| (22) 19.12.2014                      | (22) 09.03.2018                          | (72) Fain, Gerald S.              |
| (54) USE OF ISOXAZOLINE DERIVATIVES  | (54) METHOD AND INSTALLATION FOR         | (74) dr. T. Wittop Koning PhD     |
| FOR THE TREATMENT OR                 | THE INDUSTRIAL MANUFACTURE OF            | (31) 201361919167 P               |
| PREVENTION OF ARTHROPOD              | BAKERY PRODUCTS                          | 201361919332 P                    |
| INFESTATIONS IN POULTRY              | (73) Kaak Groep B.V.                     | 201361919325 P                    |
| (73) Intervet International B.V.     | (72) ZORN, Bernard                       | 201361919341 P                    |
| (72) HECKEROTH, Anja Regina          | (74) ir. F.A. Geurts c.s.                | 201361919338 P                    |
| ZOLLER, Hartmut                      | (31) 1752022                             | (32) 20.12.2013                   |
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| HUYGHE, Bruno                        | (33) France                              | 20.12.2013                        |
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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (33) United States of America<br>United States of America<br>United States of America<br>United States of America<br>United States of America                                                                                                                                                                                                                                                                                                 | HOFMANN, Nils<br>(74) ir. F.A. Geurts c.s.<br>(31) 102018115933<br>(32) 02.07.2018<br>(33) Germany<br>(47) 31.03.2021                                                                                                                                                                                                                                                                                                         | (74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 201121920<br>201121922<br>(32) 20.12.2011<br>20.12.2011<br>(33) United Kingdom<br>United Kingdom<br>(47) 07.04.2021                                                                                                                                                                                                                                                                          |
| (47) 14.04.2021<br>(51) A23G 3/34<br>A23G 3/44<br>A23L 29/281<br>(11) EP3570680<br>(21) EP18700508.7<br>(22) 19.01.2018<br>(54) METHOD AND COMPOSITION FOR<br>THE PREPARATION OF GELATIN<br>BASED GUMMY CANDIES<br>(73) Rousselot B.V.<br>(72) CAPDEPON, Claude<br>VERHEYE, Ivo Jozef Georges Simonne<br>STEVENS, Paul<br>(74) dr. A. Ellens c.s.<br>(31) 17152484<br>(32) 20.01.2017<br>(33) European Patent Office (EPO)<br>(47) 26.05.2021 | (51) A24D 1/02<br>A24D 3/04<br>A24F 1/12<br>(11) EP3457875<br>(21) EP17728784.4<br>(22) 19.05.2017<br>(54) ARTICLE FOR USE IN APPARATUS<br>FOR HEATING SMOKABLE MATERIAL<br>(73) Nicoventures Trading Limited<br>(72) ENGLAND, Will<br>WOODMAN, Tom<br>PHILLIPS, Jeremy<br>GOMEZ, Pablo Javier Ballesteros<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 201608931<br>(32) 20.05.2016<br>(33) United Kingdom<br>(47) 14.04.2021 | (51) A24F 40/10<br>A24F 40/20<br>A24F 40/30<br>A24F 40/40<br>A24F 40/50<br>(11) EP3609356<br>(21) EP18711868.2<br>(22) 09.03.2018<br>(54) AEROSOL-GENERATING DEVICE<br>(73) Philip Morris Products S.A.<br>(72) REEVELL, Tony<br>(74) dr. W.A.H.M. Van Borm<br>(31) 17165887<br>(32) 11.04.2017<br>(33) European Patent Office (EPO)<br>(47) 02.06.2021                                                                               |
| (51) A23L 3/015<br>A23L 13/70<br>(11) EP3662763<br>(21) EP19212480.8<br>(22) 29.11.2019<br>(54) PRESSURIZATION PROCESSING<br>SYSTEM<br>(73) Ideal Brain Co., Ltd.<br>(72) SATO, Takanori<br>(74) ir. F.A. Geurts c.s.<br>(31) 2018227450<br>2019079441<br>(32) 04.12.2018<br>18.04.2019<br>(33) Japan<br>Japan<br>(47) 28.04.2021                                                                                                             | (51) A24D 3/02<br>(11) EP3599904<br>(21) EP18710492.2<br>(22) 19.03.2018<br>(54) APPARATUS AND METHOD FOR<br>FORMING FILTER RODS<br>(73) Philip Morris Products S.A.<br>(72) CAPRINI, Gianni<br>(74) dr. W.A.H.M. Van Borm<br>(31) 17163140<br>(32) 27.03.2017<br>(33) European Patent Office (EPO)<br>(47) 26.05.2021                                                                                                        | (51) A24F 40/465<br>(11) EP3664639<br>(21) EP18750445.1<br>(22) 08.08.2018<br>(54) AEROSOL GENERATING SYSTEM<br>WITH NON-CIRCULAR INDUCTOR<br>COIL<br>(73) Philip Morris Products S.A.<br>(72) COURBAT, Jerome Christian<br>MIRONOV, Oleg<br>REEVELL, Tony<br>STURA, Enrico<br>(74) dr. W.A.H.M. Van Borm<br>(31) 17185590<br>(32) 09.08.2017<br>(33) European Patent Office (EPO)<br>(47) 26.05.2021                                 |
| (51) A24C 5/39<br>(11) EP3366148<br>(21) EP18156909.6<br>(22) 15.02.2018<br>(54) MACHINE FOR THE TOBACCO<br>PROCESSING INDUSTRY FOR<br>LOADING A CONTINUOUS ROD<br>MACHINE<br>(73) Hauni Maschinenbau GmbH<br>(72) VOß, Helmut<br>GOLZ, Peter<br>MÜLLER, Hans-Heinrich<br>(74) ir. F.A. Geurts c.s.<br>(31) 102017104011<br>(32) 27.02.2017<br>(33) Germany<br>(47) 31.03.2021                                                                | (54) SMOKING ARTICLE INCLUDING FLOW<br>RESTRICTOR IN HOLLOW TUBE<br>(73) Philip Morris Products S.A.<br>(72) NAPPI, Leonardo<br>BESSO, Clement<br>(74) dr. W.A.H.M. Van Borm<br>(31) 12199823<br>(32) 31.12.2012<br>(33) European Patent Office (EPO)<br>(47) 26.05.2021                                                                                                                                                      | (51) A24F 40/465<br>A24F 40/50<br>(11) EP3664640<br>(21) EP18755429.0<br>(22) 09.08.2018<br>(54) AEROSOL GENERATING SYSTEM<br>WITH MULTIPLE SUSCEPTORS<br>(73) Philip Morris Products S.A.<br>(72) MIRONOV, Oleg<br>COURBAT, Jerome Christian<br>REEVELL, Tony<br>ROSSOLL, Andreas Michael<br>STURA, Enrico<br>(74) dr. W.A.H.M. Van Borm<br>(31) 17185595<br>(32) 09.08.2017<br>(33) European Patent Office (EPO)<br>(47) 02.06.2021 |
| (51) A24C 5/47<br>(11) EP3590362<br>(21) EP19180922.7<br>(22) 18.06.2019<br>(54) MULTISEGMENT PRODUCT<br>MANUFACTURE FOR THE TOBACCO<br>PROCESSING INDUSTRY<br>(73) Hauni Maschinenbau GmbH<br>(72) MEINS, Thomas<br>MEYER, Jochem                                                                                                                                                                                                            | (51) A24D 3/04<br>(11) EP3593654<br>(21) EP19190332.7<br>(22) 20.12.2012<br>(54) SMOKING ARTICLES, AND OTHER<br>FLOW DELIVERY ARTICLES<br>(73) British American Tobacco (Investments)<br>Limited<br>(72) JOHNSON, Trevor<br>FROBISHER, Paul<br>AWTY, Edward<br>NICHOLLS, Jane<br>NANDRA, Charanjit<br>NEWNHAM, Michael<br>BOAST, David<br>SMITH, Simon<br>ABERCROMBIE, Stuart                                                 | (51) A41G 3/00<br>A61L 27/00<br>D01F 6/38<br>D01F 6/40<br>D01F 11/06<br>(11) EP3278683<br>(21) EP16772654.6<br>(22) 25.03.2016                                                                                                                                                                                                                                                                                                        |



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|---------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|----------------------------------------------------------------------------------|
| (54) ARTIFICIAL HAIR, METHOD FOR PRODUCING AN ACRYLIC FIBER FOR ARTIFICIAL HAIR, AND HEAD DECORATION PRODUCT COMPRISING THE ARTIFICIAL HAIR | (54) RUNNING SHOE HAVING LACING       | A47J 43/046                                                                      |
| (73) Kaneka Corporation                                                                                                                     | (73) On Clouds GmbH                   | A47J 43/07                                                                       |
| (72) OKAMOTO Akihiro                                                                                                                        | (72) BERNHARD, Olivier                | A47J 43/08                                                                       |
| KANO Aki                                                                                                                                    | HEITZ, Ilmarin                        | (11) EP3142528                                                                   |
| FUJITA Masato                                                                                                                               | (74) ir. J.C. Volmer c.s.             | (21) EP15722695.2                                                                |
| (74) ir. J.C. Volmer c.s.                                                                                                                   | (31) 7012015                          | (22) 07.05.2015                                                                  |
| (31) 2015069527                                                                                                                             | (32) 20.05.2015                       | (54) BEVERAGE PREPARATION DEVICE FOR PREPARATION OF A COOLED AND FOAMED BEVERAGE |
| (32) 30.03.2015                                                                                                                             | (33) Switzerland                      | (73) Société des Produits Nestlé S.A.                                            |
| (33) Japan                                                                                                                                  | (47) 07.04.2021                       | (72) AIT BOUZIAD, Youcef                                                         |
| (47) 05.05.2021                                                                                                                             | (51) A44B 11/25                       | PERRIN, Alexa                                                                    |
| (51) A41G 5/00                                                                                                                              | B60R 22/02                            | (74) ir. F.A. Geurts c.s.                                                        |
| A41G 5/02                                                                                                                                   | B60R 22/10                            | (31) 14167999                                                                    |
| A45D 8/14                                                                                                                                   | B60R 22/20                            | (32) 13.05.2014                                                                  |
| (11) EP3288405                                                                                                                              | (11) EP3594073                        | (33) European Patent Office (EPO)                                                |
| (21) EP16789851.9                                                                                                                           | (21) EP19185228.4                     | (47) 14.04.2021                                                                  |
| (22) 29.04.2016                                                                                                                             | (22) 09.07.2019                       | (51) A47J 31/06                                                                  |
| (54) CHEMICALLY MINIMIZED SYSTEM FOR TIME REDUCED APPLICATION OF EYELASH EXTENSIONS                                                         | (54) WEBBING HEIGHT ADJUSTMENT DEVICE | A47J 31/44                                                                       |
| (73) COSMO SPA LOUNGE & SUPPLY, INC. dba ILLUMINO                                                                                           | (73) Wang, Liang-Hsiung               | A47J 31/46                                                                       |
| (72) YANG, Soo-Jin                                                                                                                          | (72) WANG, LIANG-HSIUNG               | (11) EP3505025                                                                   |
| (74) ir. W.J.J.M. Kempes                                                                                                                    | CHU, Chia-Chun                        | (21) EP18210052.9                                                                |
| (31) 201562155902 P                                                                                                                         | (74) dr. ir. G.J.C. Verdijk c.s.      | (22) 25.06.2015                                                                  |
| (32) 01.05.2015                                                                                                                             | (31) 107124059                        | (54) COFFEE DISPENSING APPARATUS                                                 |
| (33) United States of America                                                                                                               | (32) 12.07.2018                       | (73) Koninklijke Philips N.V.                                                    |
| (47) 02.06.2021                                                                                                                             | (33) Taiwan, Province of China        | (72) ZEIJLSTRA, Harmina Christina                                                |
| (51) A42B 3/06                                                                                                                              | (47) 07.04.2021                       | LIPSCH, Job                                                                      |
| A42B 3/12                                                                                                                                   | (51) A47B 47/00                       | TE VELDE, Mart Kornelis-Jan                                                      |
| (11) EP3479713                                                                                                                              | A47B 87/02                            | MARRA, Johannes                                                                  |
| (21) EP18196305.9                                                                                                                           | (11) EP3193667                        | VAN DEN AKER, Karel Johannes                                                     |
| (22) 24.09.2018                                                                                                                             | (21) EP15842706.2                     | Adrianus                                                                         |
| (54) PROTECTIVE HELMET                                                                                                                      | (22) 15.09.2015                       | DE VREEDE, Jasper                                                                |
| (73) Locatelli S.p.A.                                                                                                                       | (54) MODULAR SHELVING                 | (74) drs. O. Griebeling                                                          |
| (72) Locatelli, Antonio                                                                                                                     | (73) Aleisa, Hamad F.H.S.             | (31) 14174992                                                                    |
| (74) J.M.H. Duyver lic.                                                                                                                     | (72) Aleisa, Hamad F.H.S.             | (32) 30.06.2014                                                                  |
| (31) 201700126486                                                                                                                           | (74) ir. M.F.J.M. Ketelaars c.s.      | (33) European Patent Office (EPO)                                                |
| (32) 07.11.2017                                                                                                                             | (31) 201414490300                     | (47) 28.04.2021                                                                  |
| (33) Italy                                                                                                                                  | (32) 18.09.2014                       | (51) A47J 31/36                                                                  |
| (47) 14.04.2021                                                                                                                             | (33) United States of America         | (11) EP3501345                                                                   |
| (51) A43B 3/02                                                                                                                              | (47) 14.04.2021                       | (21) EP17210543.9                                                                |
| A43B 3/04                                                                                                                                   | (51) A47B 95/04                       | (22) 22.12.2017                                                                  |
| A43B 9/00                                                                                                                                   | A47B 96/20                            | (54) EXCHANGEABLE CARTRIDGE FOR BEVERAGE PORTION DISPENSER                       |
| A43B 23/02                                                                                                                                  | B29C 63/00                            | (73) Société des Produits Nestlé S.A.                                            |
| A43B 23/04                                                                                                                                  | B32B 27/08                            | (72) ROMAND, Damien                                                              |
| (11) EP3579717                                                                                                                              | B32B 27/30                            | CROZIER, Etienne                                                                 |
| (21) EP18714599.0                                                                                                                           | B32B 27/32                            | MAGATTI, Marco                                                                   |
| (22) 07.02.2018                                                                                                                             | B32B 27/34                            | (74) ir. F.A. Geurts c.s.                                                        |
| (54) HIGH-COMFORT STRETCH BOOTS OBTAINED FROM AN IMPROVED PROCESS                                                                           | B32B 27/36                            | (47) 14.04.2021                                                                  |
| (73) Masiero Lorenzo SRL                                                                                                                    | B32B 37/12                            | (51) A47J 42/38                                                                  |
| (72) MASIERO, Lorenzo                                                                                                                       | C09J 5/06                             | (11) EP3614894                                                                   |
| (74) dr. A. Krebs                                                                                                                           | C09J 11/00                            | (21) EP19721151.9                                                                |
| (31) 201700013395                                                                                                                           | (11) EP2965905                        | (22) 29.03.2019                                                                  |
| (32) 08.02.2017                                                                                                                             | (21) EP15163035.7                     | (54) GRINDING APPARATUS AND METHOD                                               |
| (33) Italy                                                                                                                                  | (22) 09.04.2015                       | (73) Girardi S.R.L.                                                              |
| (47) 07.04.2021                                                                                                                             | (54) EDGE STRIP                       | (72) GIRARDI, Egidio                                                             |
| (51) A43B 23/02                                                                                                                             | (73) SURTECO GmbH                     | (74) ir. J.C. Volmer c.s.                                                        |
| A43B 23/26                                                                                                                                  | (72) Ottow, Martin                    | (31) 201800004111                                                                |
| A43C 1/00                                                                                                                                   | Petrakis, Jordanis                    | (32) 30.03.2018                                                                  |
| (11) EP3297485                                                                                                                              | Rohde, Domingo                        | (33) Italy                                                                       |
| (21) EP16729195.4                                                                                                                           | Schunck, Stephan                      | (47) 14.04.2021                                                                  |
| (22) 18.05.2016                                                                                                                             | (74) mr. ir. J. van Breda c.s.        | (51) A47J 43/042                                                                 |
|                                                                                                                                             | (31) 102014109750                     | A47J 43/046                                                                      |
|                                                                                                                                             | (32) 11.07.2014                       | A47J 43/07                                                                       |
|                                                                                                                                             | (33) Germany                          | (11) EP3624657                                                                   |
|                                                                                                                                             | (47) 07.04.2021                       | (21) EP18726108.6                                                                |
|                                                                                                                                             | (51) A47J 31/00                       | (22) 16.05.2018                                                                  |
|                                                                                                                                             | A47J 31/36                            |                                                                                  |
|                                                                                                                                             | A47J 31/40                            |                                                                                  |
|                                                                                                                                             | A47J 31/44                            |                                                                                  |

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|--------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) MIXING AND BLENDING APPARATUS FOR LIQUID OR PASTY FOOD PREPARATIONS, SUCH AS A BLENDER, PROVIDED WITH A DEVICE FOR LOCKING THE BLADES ON THE BOWL | YOUN, Jin Wook<br>HA, Dong Woo<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 20150078328<br>(32) 03.06.2015<br>(33) Korea (Republic)<br>(47) 19.05.2021 | (51) A61B 1/04<br>A61B 1/06<br>(11) EP2967286<br>(21) EP14764363.9<br>(22) 15.03.2014<br>(54) MINIMIZE IMAGE SENSOR I/O AND CONDUCTOR COUNTS IN ENDOSCOPE APPLICATIONS |
| (73) SEB S.A.                                                                                                                                          | (51) A47L 9/04                                                                                                                                        | (73) DePuy Synthes Products, Inc.                                                                                                                                      |
| (72) FERON, Stéphanie<br>LEMARIE, Christophe<br>QUINTON, Sébastien                                                                                     | (11) EP3231343<br>(21) EP17172688.8<br>(22) 04.07.2012                                                                                                | (72) BLANQUART, Laurent                                                                                                                                                |
| (74) ir. M.F.J.M. Ketelaars c.s.                                                                                                                       | (54) UPRIGHT CLEANER                                                                                                                                  | (74) ir. M.F.J.M. Ketelaars c.s.                                                                                                                                       |
| (31) 1754373                                                                                                                                           | (73) Samsung Electronics Co., Ltd.                                                                                                                    | (31) 201361791547 P                                                                                                                                                    |
| (32) 17.05.2017                                                                                                                                        | (72) YUN, Min Ro                                                                                                                                      | 201361790590 P                                                                                                                                                         |
| (33) France                                                                                                                                            | (74) ir. M.F.J.M. Ketelaars c.s.                                                                                                                      | (32) 15.03.2013                                                                                                                                                        |
| (47) 09.06.2021                                                                                                                                        | (31) 20110066535                                                                                                                                      | 15.03.2013                                                                                                                                                             |
| (51) A47J 43/08                                                                                                                                        | (32) 05.07.2011                                                                                                                                       | (33) United States of America                                                                                                                                          |
| (11) EP3554326                                                                                                                                         | (33) Korea (Republic)                                                                                                                                 | United States of America                                                                                                                                               |
| (21) EP17822593.4                                                                                                                                      | (47) 07.04.2021                                                                                                                                       | (47) 23.06.2021                                                                                                                                                        |
| (22) 11.12.2017                                                                                                                                        | (51) A61B 1/00                                                                                                                                        | (51) A61B 3/02                                                                                                                                                         |
| (54) HEAT MANAGEMENT FOR FOOD PROCESSOR                                                                                                                | A61B 1/015                                                                                                                                            | A61F 9/02                                                                                                                                                              |
| (73) Société des Produits Nestlé S.A.                                                                                                                  | (11) EP3197335                                                                                                                                        | A61H 5/00                                                                                                                                                              |
| (72) DERCAR, Heinz                                                                                                                                     | (21) EP15778487.7                                                                                                                                     | G02B 27/01                                                                                                                                                             |
| GUYON, Bertrand                                                                                                                                        | (22) 25.09.2015                                                                                                                                       | (11) EP3530242                                                                                                                                                         |
| MOLINARO, Alessandro                                                                                                                                   | (54) MEDICAL DEVICES                                                                                                                                  | (21) EP16924096.7                                                                                                                                                      |
| NIEUWENDIJK, Johan                                                                                                                                     | (73) Boston Scientific Scimed, Inc.                                                                                                                   | (22) 15.12.2016                                                                                                                                                        |
| TUIDER, Wolfgang                                                                                                                                       | (72) OSKIN, Christopher, L.                                                                                                                           | (54) VISION TRAINING DEVICE FOR RECOGNITION CORRECTION                                                                                                                 |
| (74) ir. F.A. Geurts c.s.                                                                                                                              | (74) ir. H.J.G. Lips c.s.                                                                                                                             | (73) Edenlux Corporation                                                                                                                                               |
| (31) 16203740                                                                                                                                          | (31) 201462056313 P                                                                                                                                   | (72) PARK, Sungyong                                                                                                                                                    |
| (32) 13.12.2016                                                                                                                                        | (32) 26.09.2014                                                                                                                                       | (74) ir. W.J.J.M. Kempes                                                                                                                                               |
| (33) European Patent Office (EPO)                                                                                                                      | (33) United States of America                                                                                                                         | (47) 19.05.2021                                                                                                                                                        |
| (47) 28.04.2021                                                                                                                                        | (47) 07.04.2021                                                                                                                                       | (51) A61B 5/00                                                                                                                                                         |
| (51) A47K 7/03                                                                                                                                         | (51) A61B 1/00                                                                                                                                        | (11) EP3013214                                                                                                                                                         |
| A47L 13/16                                                                                                                                             | A61B 1/018                                                                                                                                            | (21) EP14736456.6                                                                                                                                                      |
| A47L 13/17                                                                                                                                             | A61B 10/02                                                                                                                                            | (22) 18.06.2014                                                                                                                                                        |
| A47L 17/08                                                                                                                                             | A61B 10/04                                                                                                                                            | (54) EARLY CONFIRMATION OF A PROLONGED APERIODIC MEASUREMENT                                                                                                           |
| (11) EP2849625                                                                                                                                         | (11) EP3551029                                                                                                                                        | (73) Koninklijke Philips N.V.                                                                                                                                          |
| (21) EP13710398.2                                                                                                                                      | (21) EP17823268.2                                                                                                                                     | (72) MEIER, Wilhelm                                                                                                                                                    |
| (22) 15.03.2013                                                                                                                                        | (22) 06.12.2017                                                                                                                                       | GREINER, Harald                                                                                                                                                        |
| (54) SPONGE WITH LEADING CAVITY                                                                                                                        | (54) SYSTEMS FOR ECCENTRIC NODULE TISSUE ACQUISITION                                                                                                  | EMMRICH, Thomas Gerhard                                                                                                                                                |
| (73) Eurvest S.A.                                                                                                                                      | (73) Boston Scientific Scimed, Inc.                                                                                                                   | ZIMMERMANN, Steffen                                                                                                                                                    |
| (72) KLIMIS, Pierre                                                                                                                                    | (72) FLEURY, Sean                                                                                                                                     | (74) drs. O. Griebeling                                                                                                                                                |
| LUCIANI, Alain                                                                                                                                         | LEANNA, Gary                                                                                                                                          | (31) 201361838376 P                                                                                                                                                    |
| MANCEL, Claude                                                                                                                                         | GARRITY, Douglas                                                                                                                                      | (32) 24.06.2013                                                                                                                                                        |
| THIEBAUD, Dominique                                                                                                                                    | NGUYEN, Thinh                                                                                                                                         | (33) United States of America                                                                                                                                          |
| (74) J.M.H. Duyver lic.                                                                                                                                | (74) ir. A.R. Aalbers                                                                                                                                 | (47) 21.04.2021                                                                                                                                                        |
| (31) 1254301                                                                                                                                           | (31) 201662431006 P                                                                                                                                   | (51) A61B 5/00                                                                                                                                                         |
| 1262734                                                                                                                                                | (32) 07.12.2016                                                                                                                                       | A61B 5/107                                                                                                                                                             |
| (32) 10.05.2012                                                                                                                                        | (33) United States of America                                                                                                                         | A61B 5/22                                                                                                                                                              |
| 21.12.2012                                                                                                                                             | (47) 07.04.2021                                                                                                                                       | B62M 3/00                                                                                                                                                              |
| (33) France                                                                                                                                            | (51) A61B 1/00                                                                                                                                        | B62M 3/08                                                                                                                                                              |
| France                                                                                                                                                 | A61B 17/221                                                                                                                                           | B62J 45/40                                                                                                                                                             |
| (47) 05.05.2021                                                                                                                                        | (11) EP3592256                                                                                                                                        | (11) EP3235713                                                                                                                                                         |
| (51) A47L 9/00                                                                                                                                         | (21) EP18713519.9                                                                                                                                     | (21) EP17163567.5                                                                                                                                                      |
| A47L 9/02                                                                                                                                              | (22) 09.03.2018                                                                                                                                       | (22) 29.03.2017                                                                                                                                                        |
| A47L 9/28                                                                                                                                              | (54) ACTUATOR DEVICES AND SYSTEMS                                                                                                                     | (54) MEASURING DEVICE AND MEASURING METHOD FOR PEDAL PLANE ANGLE OF BICYCLE                                                                                            |
| B25J 11/00                                                                                                                                             | (73) Boston Scientific Scimed Inc.                                                                                                                    | (73) Giant Manufacturing Co., Ltd.                                                                                                                                     |
| (11) EP3305153                                                                                                                                         | (72) TAH, Richard                                                                                                                                     | (72) SHEN, Chih-Hsiang                                                                                                                                                 |
| (21) EP16803621.8                                                                                                                                      | MACLEAN, Brian                                                                                                                                        | HO, Wei-Chieh                                                                                                                                                          |
| (22) 01.06.2016                                                                                                                                        | HERA, Mark                                                                                                                                            | CHEN, Chien-Hung                                                                                                                                                       |
| (54) ROBOT VACUUM                                                                                                                                      | PEREIRA, Peter                                                                                                                                        | (74) ir. W.J.J.M. Kempes                                                                                                                                               |
| (73) Samsung Electronics Co., Ltd.                                                                                                                     | (74) ir. H.J.G. Lips c.s.                                                                                                                             | (31) 105111992                                                                                                                                                         |
| (72) HONG, Seok Man                                                                                                                                    | (31) 201762469902 P                                                                                                                                   | (32) 18.04.2016                                                                                                                                                        |
| KIM, Dong Wook                                                                                                                                         | (32) 10.03.2017                                                                                                                                       | (33) Taiwan, Province of China                                                                                                                                         |
| KIM, Sin Ae                                                                                                                                            | (33) United States of America                                                                                                                         |                                                                                                                                                                        |
| KWON, Ki Hwan                                                                                                                                          | (47) 21.04.2021                                                                                                                                       |                                                                                                                                                                        |
| PARK, Sung Jin                                                                                                                                         |                                                                                                                                                       |                                                                                                                                                                        |
| SIN, Hyo Won                                                                                                                                           |                                                                                                                                                       |                                                                                                                                                                        |

|                                       |                                     |                                              |
|---------------------------------------|-------------------------------------|----------------------------------------------|
| (47) 07.04.2021                       | EDWARDS, Jerome R.                  | (33) United States of America                |
| (51) A61B 5/026                       | LEE, Christopher B.                 | (47) 16.06.2021                              |
| G06F 3/01                             | AUSTILL, Evan Jr.                   | (51) A61B 5/06                               |
| G09G 5/00                             | (74) J.M.H. Duyver lic.             | A61B 18/20                                   |
| (11) EP2915025                        | (31) 22402805                       | G02B 6/36                                    |
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| (22) 01.11.2013                       | (32) 13.09.2005                     | (21) EP13855244.3                            |
| (54) WIRELESS WRIST COMPUTING AND     | 24.04.2006                          | (22) 18.11.2013                              |
| CONTROL DEVICE AND METHOD             | (33) United States of America       | (54) FIBER OPTIC CONNECTOR FOR               |
| FOR 3D IMAGING, MAPPING,              | United States of America            | LASER SOURCES                                |
| NETWORKING AND INTERFACING            | (47) 02.06.2021                     | (73) biolitec Unternehmensbeteiligungs II AG |
| (73) Eyecam, Inc.                     | (51) A61B 5/055                     | (72) NEUBERGER, Wolfgang                     |
| (72) DAVIS, Bryan, Jonathan           | A61B 6/04                           | (74) ir. F.A. Geurts c.s.                    |
| FISHER, James                         | A61N 5/10                           | (31) 201261727514 P                          |
| FISHER, Ronald, Eugene                | (11) EP3398654                      | (32) 16.11.2012                              |
| MACLAY, Walter, Norman                | (21) EP18168943.1                   | (33) United States of America                |
| TYRRELL, Stuart Gregory               | (22) 24.04.2018                     | (47) 14.04.2021                              |
| (74) J.M.H. Duyver lic.               | (54) SQUEEZE PROTECTION             | (51) A61B 5/07                               |
| (31) 201261796056 P                   | (73) Elekta Limited                 | A61B 17/11                                   |
| (32) 01.11.2012                       | (72) ALEXIS, Henrik                 | A61B 17/12                                   |
| (33) United States of America         | ELDERED, Kjell                      | A61F 2/00                                    |
| (47) 07.04.2021                       | CARLANDER, Erik                     | A61F 2/02                                    |
| (51) A61B 5/0452                      | (74) dr. A. Krebs                   | A61F 2/26                                    |
| A61B 5/0456                           | (31) 201715586988                   | A61F 5/00                                    |
| (11) EP3367897                        | (32) 04.05.2017                     | A61F 5/41                                    |
| (21) EP16787481.7                     | (33) United States of America       | A61F 5/445                                   |
| (22) 27.10.2016                       | (47) 10.03.2021                     | A61F 7/02                                    |
| (54) AN AUTOMATIC METHOD TO           | (51) A61B 5/055                     | A61N 1/05                                    |
| DELINEATE OR CATEGORIZE AN            | A61K 49/00                          | A61N 1/36                                    |
| ELECTROCARDIOGRAM                     | A61K 49/10                          | A61N 1/365                                   |
| (73) Cardiologs Technologies          | A61K 49/22                          | A61N 1/378                                   |
| (72) RAPIN, Jérémy                    | A61K 51/04                          | A61N 1/40                                    |
| LI, Jia                               | C07B 59/00                          | F04B 43/08                                   |
| MASSIAS, Mathurin                     | C07D 237/16                         | F04B 43/10                                   |
| (74) ir. A.R. Aalbers                 | (11) EP3385253                      | A61F 2/04                                    |
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| (33) European Patent Office (EPO)     | (73) Lantheus Medical Imaging, Inc. | (54) APPARATUS FOR CONTROLLING               |
| United States of America              | (72) CASEBIER, David S.             | FLOW OF BLOOD IN A VESSEL                    |
| (47) 14.04.2021                       | ROBINSON, Simon P.                  | (73) Implantica Patent Ltd.                  |
| (51) A61B 5/0488                      | PUROHIT, Ajay                       | (72) FORSELL, Peter                          |
| A61F 2/72                             | RADEKE, Heike S.                    | (74) ir. M.F.J.M. Ketelaars c.s.             |
| A61F 2/78                             | AZURE, Michael, T.                  | (31) 960715 P                                |
| A61F 2/80                             | DISCHINO, Douglas D.                | (32) 11.10.2007                              |
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| (22) 05.11.2018                       | 55498                               | (51) A61B 5/11                               |
| (54) PROSTHESIS SYSTEM WITH A LINER   | (32) 13.02.2004                     | G01C 21/16                                   |
| AND A PROSTHESIS SOCKET               | 10.02.2005                          | G01M 17/007                                  |
| (73) Ottobock SE & Co. KGaA           | (33) United States of America       | (11) EP3583900                               |
| (72) KOPPE, Mario                     | United States of America            | (21) EP19172017.6                            |
| (74) ir. M.F.J.M. Ketelaars c.s.      | (47) 07.04.2021                     | (22) 30.04.2019                              |
| (31) 102017126462                     | (51) A61B 5/055                     | (54) IMPACT MOTION TRACKING SYSTEM           |
| (32) 10.11.2017                       | G01R 33/28                          | (73) Kistler Holding AG                      |
| (33) Germany                          | G01R 33/36                          | (72) Verschut, Roderick                      |
| (47) 05.05.2021                       | (11) EP2790577                      | Warkentin, Thomas                            |
| (51) A61B 5/05                        | (21) EP12857682.4                   | Stein, David                                 |
| (11) EP3492008                        | (22) 13.12.2012                     | (74) dr. A. Krebs                            |
| (21) EP19153753.9                     | (54) MR ACTIVE TRACKING SYSTEM      | (31) 201862684309 P                          |
| (22) 12.09.2006                       | (73) Imricor Medical Systems, Inc.  | (32) 13.06.2018                              |
| (54) APPARATUS AND METHOD FOR         | (72) WEDAN, Steven R.               | (33) United States of America                |
| IMAGE GUIDED ACCURACY                 | LLOYD, Thomas W.                    | (47) 09.06.2021                              |
| VERIFICATION                          | STENZEL, Gregg S.                   | (51) A61B 17/00                              |
| (73) Veran Medical Technologies, Inc. | (74) ir. H.A. Witmans c.s.          | A61B 18/00                                   |
| (72) LYON, Torsten M.                 | (31) 201161576180 P                 | A61B 18/14                                   |
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| (11) EP2712566                                                       | OJDE, Magnus                        | (22) 25.04.2017                        |
| (21) EP13185991.0                                                    | (74) ir. M.F.J.M. Ketelaars c.s.    | (54) LIGATING CLIP                     |
| (22) 25.09.2013                                                      | (31) 17167459                       | (73) Grena USA LLC                     |
| (54) Temperature simulator for thermocouple-based rf ablation system | (32) 21.04.2017                     | (72) BRODACZEWSKI, Wieslaw, Mieczyslaw |
| (73) Biosense Webster (Israel) Ltd.                                  | (33) European Patent Office (EPO)   | DECEWICZ, Andrzej, Janusz              |
| (72) Gliner, Vadim                                                   | (47) 07.04.2021                     | (74) dr. W.A.H.M. Van Borm             |
| Govari, Assaf                                                        | (51) A61B 17/04                     | (31) 201662328652 P                    |
| (74) ir. M.F.J.M. Ketelaars c.s.                                     | A61B 17/064                         | 201715466773                           |
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| (33) United States of America                                        | A61B 17/128                         | (33) United States of America          |
| (47) 31.03.2021                                                      | (11) EP2854659                      | United States of America               |
| (51) A61B 17/00                                                      | (21) EP13723950.5                   | (47) 31.03.2021                        |
| A61B 18/00                                                           | (22) 15.02.2013                     | (51) A61B 17/16                        |
| A61B 18/20                                                           | (54) VARIABLE DEPTH SURGICAL        | A61B 90/90                             |
| (11) EP3512448                                                       | FIXATION                            | (11) EP3212095                         |
| (21) EP17777713.3                                                    | (73) Via Surgical Ltd.              | (21) EP15791460.7                      |
| (22) 15.09.2017                                                      | (72) LEVY, Arie                     | (22) 29.10.2015                        |
| (54) DUAL-WAVELENGTH LASER                                           | LEVIN, Ofek                         | (54) SURGICAL TOOL WITH AN ASEPTIC     |
| TREATMENT                                                            | LEVIN, Lena                         | POWER MODULE THAT ENTERS A             |
| (73) Boston Scientific Scimed, Inc.                                  | (74) ir. W.J.J.M. Kempes            | SPECIFIC OPERATING STATE BASED         |
| (72) XUAN, Rongwei, Jason                                            | (31) 201261653792 P                 | ON THE TYPE OF HANDPIECE TO            |
| KOULLICK, Edouard, A.                                                | 201213523500                        | WHICH THE MODULE IS ATTACHED           |
| HASENBERG, Thomas                                                    | (32) 31.05.2012                     | (73) Stryker Far East, Inc.            |
| HWANG, Jieun                                                         | 14.06.2012                          | (72) MISTRY, Viren P.                  |
| KIM, Hyejin                                                          | (33) United States of America       | CARUSILLO, Steven                      |
| PYO, Hanjae                                                          | United States of America            | (74) J.M.H. Duyver lic.                |
| KANG, Hyun Wook                                                      | (47) 07.04.2021                     | (31) 3110DE2014                        |
| GONG, Jason                                                          | (51) A61B 17/04                     | (32) 30.10.2014                        |
| YANG, Xirong                                                         | A61B 17/12                          | (33) India                             |
| YU, Honggang                                                         | (11) EP3405119                      | (47) 02.06.2021                        |
| (74) ir. H.J.G. Lips c.s.                                            | (21) EP16858197.3                   | (51) A61B 17/22                        |
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| (32) 16.09.2016                                                      | (54) SYSTEM FOR SUTURE KNOT         | A61N 7/00                              |
| (33) United States of America                                        | FORMING                             | (11) EP3285661                         |
| (47) 31.03.2021                                                      | (73) Terumo Medical Corporation     | (21) EP16783908.3                      |
| (51) A61B 17/04                                                      | (72) JUAN, Chun-Chia                | (22) 22.04.2016                        |
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| (21) EP14157436.8                                                    | CHENG, Shu-Ling                     | ACOUSTIC PRESSURE SHOCK                |
| (22) 04.10.2004                                                      | (74) ir. W.J.J.M. Kempes            | WAVES                                  |
| (54) Systems for a delivering a medical                              | (31) 201562245841 P                 | (73) Sanuwave, Inc.                    |
| implant to an anatomical location in a                               | 201662332701 P                      | (72) CIOANTA, Iulian                   |
| patient                                                              | (32) 23.10.2015                     | (74) ir. J.D. de Zeeuw                 |
| (73) Boston Scientific Limited, an Irish                             | 06.05.2016                          | (31) 201562152067 P                    |
| company                                                              | (33) United States of America       | (32) 24.04.2015                        |
| (72) Chu, Michael, S., H.                                            | United States of America            | (33) United States of America          |
| Intoccia, Alfred, P., Jr.                                            | (47) 26.05.2021                     | (47) 14.04.2021                        |
| Moore, Tim                                                           | (51) A61B 17/12                     | (51) A61B 17/34                        |
| (74) ir. H.J.G. Lips c.s.                                            | (11) EP2967573                      | A61M 19/00                             |
| (31) 508600 P                                                        | (21) EP14717925.3                   | A61M 25/00                             |
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| (33) United States of America                                        | (73) Stryker Corporation            | (21) EP13817682.1                      |
| United States of America                                             | Stryker European Holdings I, LLC    | (22) 20.12.2013                        |
| (47) 05.05.2021                                                      | (72) CHEN, Hancun                   | (54) SET FOR PERIPHERAL NERVE          |
| (51) A61B 17/04                                                      | TEOH, Clifford                      | BLOCKING                               |
| A61B 17/06                                                           | GUO, Lantao                         | (73) Pajunk GmbH Medizintechnologie    |
| A61B 17/062                                                          | ODELL, Timothy                      | (72) PAJUNK, Horst                     |
| A61B 17/064                                                          | MURPHY, Richard                     | PAJUNK, Heinrich                       |
| A61B 17/072                                                          | (74) ir. A. Blokland c.s.           | (74) J.M.H. Duyver lic.                |
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| (22) 23.04.2018                                                      | (33) United States of America       | (33) Germany                           |
| (54) WOUND CLOSURE DEVICE                                            | (47) 21.04.2021                     | (47) 07.04.2021                        |
| (73) Gothenburg Medtech Innovations AB                               | (51) A61B 17/122                    | (51) A61B 34/10                        |
| (72) OCKELL, Jonas                                                   | (11) EP3461255                      | A61B 34/30                             |
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| (21) EP16780883.1                                                | (73) Implantica Patent Ltd.                                      | WEISZ, Ety                                          |
| (22) 15.04.2016                                                  | (72) FORSELL, Peter                                              | (74) ir. M.F.J.M. Ketelaars c.s.                    |
| (54) INTEGRATED MEDICAL IMAGING AND SURGICAL ROBOTIC SYSTEM      | (74) ir. M.F.J.M. Ketelaars c.s.                                 | (31) 686338                                         |
| (73) Mobius Imaging, LLC                                         | (31) 0802154                                                     | (32) 12.01.2010                                     |
| (72) GREGERSON, Eugene A.                                        | 227831 P                                                         | (33) United States of America                       |
| SEBRING, Paul                                                    | (32) 10.10.2008                                                  | (47) 05.05.2021                                     |
| STANTON, Russell                                                 | 23.07.2009                                                       | (51) A61F 2/24                                      |
| COPPEN, Scott                                                    | (33) Sweden                                                      | (11) EP3632379                                      |
| HARRIS, Adeline                                                  | United States of America                                         | (21) EP19196913.8                                   |
| FURLONG, Todd                                                    | (47) 07.04.2021                                                  | (22) 04.08.2016                                     |
| BAKER, Jeff                                                      | (51) A61F 2/06                                                   | (54) EVERTING LEAFLET DELIVERY SYSTEM WITH PIVOTING |
| (74) J.M.H. Duyver lic.                                          | A61F 2/07                                                        | (73) Boston Scientific Scimed, Inc.                 |
| (31) 201562147924 P                                              | A61F 2/89                                                        | (72) BACKUS, Andrew J. H.                           |
| (32) 15.04.2015                                                  | (11) EP3410983                                                   | GAMARRA, Randy S.                                   |
| (33) United States of America                                    | (21) EP17703133.3                                                | INO, Takashi H.                                     |
| (47) 16.06.2021                                                  | (22) 03.02.2017                                                  | CRISOSTOMO, Crissly V.                              |
| (51) A61C 3/025                                                  | (54) VASCULAR PROSTHESIS HAVING SIDE BRANCHES                    | (74) ir. W.J.J.M. Kempes                            |
| A61C 17/02                                                       | (73) JOTEC GmbH                                                  | (31) 201562204080 P                                 |
| (11) EP3607911                                                   | (72) WALTHER, Michael                                            | 201615219572                                        |
| (21) EP18188331.5                                                | KLEIN, Karsten                                                   | (32) 12.08.2015                                     |
| (22) 09.08.2018                                                  | MERZ, Juergen                                                    | 26.07.2016                                          |
| (54) NOZZLE SYSTEM AND POWDER BLASTING DEVICE                    | ULMER, Jan                                                       | (33) United States of America                       |
| (73) Ferton Holding S.A.                                         | (74) ir. A. Blokland c.s.                                        | United States of America                            |
| (72) BEANI, Florent                                              | (31) 102016102008                                                | (47) 21.04.2021                                     |
| DONNET, Marcel                                                   | (32) 04.02.2016                                                  | (51) A61F 2/24                                      |
| FOURNIER, Maxime                                                 | (33) Germany                                                     | (11) EP3646824                                      |
| SAUVAGEOT-MAXIT, Karine                                          | (47) 07.04.2021                                                  | (21) EP19217444.9                                   |
| PICHAT, Patrick                                                  | (51) A61F 2/16                                                   | (22) 16.07.2012                                     |
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| (74) ir. A. Blokland c.s.                                        | (21) EP18701579.7                                                | (73) Edwards Lifesciences Corporation               |
| (47) 07.04.2021                                                  | (22) 09.01.2018                                                  | (72) YOHANAN, Ziv                                   |
| (51) A61C 8/00                                                   | (54) INTRAOCULAR LENS INJECTOR                                   | GUROVICH, Nik                                       |
| A61C 13/225                                                      | (73) Alcon Inc.                                                  | FELSEN, Bella                                       |
| (11) EP3332734                                                   | (72) BROWN, Kyle                                                 | PELLED, Itai                                        |
| (21) EP16833152.8                                                | TRAN, Tu Cam                                                     | MEIRI, Oded                                         |
| (22) 22.02.2016                                                  | WU, Yinghui                                                      | (74) ir. F.A. Geurts c.s.                           |
| (54) THREADED DENTAL IMPLANT                                     | (74) ir. W.J.J.M. Kempes                                         | (31) 201161508456 P                                 |
| (73) Wang, Je Won                                                | (31) 201762446194 P                                              | 201213549068                                        |
| (72) Wang, Je Won                                                | 201762469682 P                                                   | (32) 15.07.2011                                     |
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| (32) 03.08.2015                                                  | (33) United States of America                                    | United States of America                            |
| (33) Korea (Republic)                                            | (47) 21.04.2021                                                  | (47) 28.04.2021                                     |
| (47) 09.06.2021                                                  | (51) A61F 2/16                                                   | (51) A61F 2/24                                      |
| (51) A61C 13/093                                                 | (11) EP3691571                                                   | A61M 29/00                                          |
| A61C 13/10                                                       | (21) EP18774079.0                                                | A61M 39/22                                          |
| (11) EP3572035                                                   | (22) 01.10.2018                                                  | A61F 2/82                                           |
| (21) EP18174001.0                                                | (54) ASSEMBLY CONSISTING OF A PAIR OF MULTIFOCAL OCULAR IMPLANTS | (11) EP3290004                                      |
| (22) 24.05.2018                                                  | (73) Cristalens Industrie                                        | (21) EP17190960.9                                   |
| (54) DENTAL PROSTHESIS, ASSOCIATED SEMI-FINISHED PRODUCT AND KIT | (72) CASTIGNOLES, Fannie                                         | (22) 18.12.2009                                     |
| (73) Ivoclar Vivadent AG                                         | DELAGE, Denis                                                    | (54) QUICK-CONNECT PROSTHETIC HEART VALVE           |
| (72) Häfele, Clemens, Andreas                                    | (74) ir. F.A. Geurts c.s.                                        | (73) Edwards Lifesciences Corporation               |
| Krybus, Robert, Wolfgang                                         | (31) 1759329                                                     | (72) PINTOR, Rafael                                 |
| Hagenbuch, Konrad                                                | (32) 05.10.2017                                                  | CHAU, Mark                                          |
| (74) ir. F.A. Geurts c.s.                                        | (33) France                                                      | OBA, Travis                                         |
| (47) 07.04.2021                                                  | (47) 28.04.2021                                                  | YAMBAO, August                                      |
| (51) A61F 2/00                                                   | (51) A61F 2/24                                                   | CAMPBELL, Louis                                     |
| A61M 1/00                                                        | (11) EP3178445                                                   | HUNTLEY, Tammy                                      |
| A61M 27/00                                                       | (21) EP17153292.2                                                | ZENG, Qinggang                                      |
| A61F 2/04                                                        | (22) 13.01.2010                                                  | CRISTEA, Carey                                      |
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| (21) EP09819502.7                                                | (73) VALVE MEDICAL LTD.                                          | (74) ir. F.A. Geurts c.s.                           |
| (22) 09.10.2009                                                  | (72) RICHTER, Yoram                                              | (31) 139398 P                                       |
| (54) IMPLANTABLE DEVICE FOR INTERNAL URINARY CONTROL             | RICHTER, Jacob                                                   | 635471                                              |
|                                                                  |                                                                  | (32) 19.12.2008                                     |

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| (33) United States of America        | (47) 28.04.2021                    | (51) A61F 13/00                  |
| United States of America             | (51) A61F 5/445                    | A61F 13/02                       |
| (47) 21.04.2021                      | A61F 5/449                         | A61L 15/42                       |
| (51) A61F 2/30                       | A61M 3/02                          | (11) EP3481350                   |
| A61F 2/38                            | A61M 16/04                         | (21) EP17728832.1                |
| (11) EP3626209                       | A61M 16/20                         | (22) 08.06.2017                  |
| (21) EP19206702.3                    | A61M 25/04                         | (54) DERMAL PATCH                |
| (22) 08.05.2018                      | A61M 25/10                         | (73) Carl Freudenberg KG         |
| (54) TIBIAL TRAY WITH FIXATION       | (11) EP2780068                     | (72) HOFBAUER, Thomas            |
| FEATURES                             | (21) EP12849279.0                  | BEYER, Daniela                   |
| (73) DePuy Ireland Unlimited Company | (22) 15.11.2012                    | VILLING-FALUSI, Sandra           |
| (72) HELDRETH, Mark A.               | (54) APPARATUS FOR PREVENTING OVER | (74) ir. W.J.J.M. Kempes         |
| RUMPLE, Jr. Danny W.                 | INFLATION OF THE RETENTION         | (31) 102016008257                |
| HAINES, Alyssa M.                    | BALLOON IN MEDICAL CATHETERS       | (32) 08.07.2016                  |
| MASON, J. Bohannon                   | AND AIRWAY DEVICES                 | (33) Germany                     |
| (74) ir. M.F.J.M. Ketelaars c.s.     | (73) Convatec Technologies, Inc.   | (47) 14.04.2021                  |
| (31) 201715590537                    | (72) GREGORY, Christopher          | (51) A61F 13/02                  |
| (32) 09.05.2017                      | JIN, Yun                           | (11) EP2753277                   |
| (33) United States of America        | CLINE, John, B.                    | (21) EP12759082.6                |
| (47) 28.04.2021                      | (74) ir. H.J.G. Lips c.s.          | (22) 06.09.2012                  |
| (51) A61F 2/95                       | (31) 201161560489 P                | (54) LOOP SLITTER                |
| A61F 2/962                           | (32) 16.11.2011                    | (73) Luye Pharma AG              |
| (11) EP3621561                       | (33) United States of America      | (72) GRADER, Ludwig              |
| (21) EP18719769.4                    | (47) 23.06.2021                    | PIOTROWSKI, Holger               |
| (22) 09.04.2018                      | (51) A61F 7/02                     | (74) dr. A. Krebs                |
| (54) HANDLE FOR A CATHETER, AND      | (11) EP3197407                     | (31) 102011082458                |
| CORRESPONDING CATHETER               | (21) EP15774655.3                  | (32) 09.09.2011                  |
| (73) Biotronik AG                    | (22) 22.09.2015                    | (33) Germany                     |
| (72) WESTHOFF, Felix                 | (54) HEAT EXCHANGER CAP            | (47) 09.06.2021                  |
| ROTHFUCHS, Nuria                     | (73) Paxman Coolers Limited        | (51) A61F 13/02                  |
| (74) drs. C.H. Mink-Lindenburg       | (72) DR UNVER, Ertugrul            | A61M 5/14                        |
| (31) 17169996                        | PAXMAN, Glenn Alan                 | A61M 5/168                       |
| (32) 08.05.2017                      | PAXMAN, Neil Eric                  | A61M 39/02                       |
| (33) European Patent Office (EPO)    | (74) ir. W.J.J.M. Kempes           | (11) EP2844316                   |
| (47) 02.06.2021                      | (31) 201416765                     | (21) EP13785308.1                |
| (51) A61F 2/966                      | (32) 23.09.2014                    | (22) 13.03.2013                  |
| (11) EP3285700                       | (33) United Kingdom                | (54) APPLIANCE FOR AN            |
| (21) EP16783843.2                    | (47) 19.05.2021                    | ELECTROMAGNETIC SPECTRUM         |
| (22) 21.04.2016                      | (51) A61F 7/02                     | SENSOR MONITORING AN             |
| (54) SYSTEMS FOR STENT DELIVERY      | A61F 7/10                          | INTRAVASCULAR INFUSION           |
| (73) Boston Scientific Scimed, Inc.  | (11) EP2827813                     | (73) ivWatch, LLC                |
| (72) NEGLEN, Peter                   | (21) EP13721064.7                  | (72) WARREN, Gary, P.            |
| KAO, Stephen                         | (22) 12.03.2013                    | BOWERS, Marilyn J.               |
| CHINUBHAI, Abha                      | (54) COLD THERAPY DEVICE           | ALLEY, Matthew S.                |
| LAGOE, Daniel                        | (73) Angelini Pharma Inc.          | ANCHELL, Scott J.                |
| TRAN, Lieu                           | (72) EBEL, James Patrick           | (74) ir. M.F.J.M. Ketelaars c.s. |
| (74) ir. A.R. Aalbers                | FRANCO, Marle                      | (31) 201261640542 P              |
| (31) 201562150638 P                  | LOOMIS, Erik Douglas               | (32) 30.04.2012                  |
| (32) 21.04.2015                      | (74) ir. A. Blokland c.s.          | (33) United States of America    |
| (33) United States of America        | (31) 201261614766 P                | (47) 05.05.2021                  |
| (47) 14.04.2021                      | (32) 23.03.2012                    | (51) A61J 1/03                   |
| (51) A61F 5/01                       | (33) United States of America      | A61J 7/04                        |
| A61F 5/02                            | (47) 19.05.2021                    | G01R 27/02                       |
| A61F 13/00                           | (51) A61F 9/00                     | G01R 27/26                       |
| A61F 13/04                           | A61M 11/00                         | H05K 1/02                        |
| A61F 13/06                           | (11) EP3331479                     | H05K 1/03                        |
| (11) EP3538038                       | (21) EP16741044.8                  | H05K 1/09                        |
| (21) EP17794733.0                    | (22) 21.07.2016                    | H05K 1/16                        |
| (22) 08.11.2017                      | (54) A DEVICE FOR APPLYING AN      | H05K 3/28                        |
| (54) TENSIONING BAND                 | OPHTHALMIC FLUID                   | (11) EP3430867                   |
| (73) Bauerfeind AG                   | (73) Eye-Go A/S                    | (21) EP16750635.1                |
| (72) BECK, André                     | (72) NIELSEN, Søren Anker          | (22) 19.07.2016                  |
| ALBERT, Frank                        | SOLGÅRD, Kurt                      | (54) MONITORING CIRCUITRY AND    |
| BAUERFEIND, Hans B.                  | (74) ir. M.F.J.M. Ketelaars c.s.   | MANUFACTURING PROCESS            |
| (74) ir. M.F.J.M. Ketelaars c.s.     | (31) 201570504                     | THEREFOR                         |
| (31) 102016121657                    | (32) 04.08.2015                    | (73) HP Indigo B.V.              |
| (32) 11.11.2016                      | (33) Denmark                       | (72) AMIR, Gideon                |

|                                                                                                |                                                 |                                                     |
|------------------------------------------------------------------------------------------------|-------------------------------------------------|-----------------------------------------------------|
| (74) dr. W.A.H.M. Van Borm                                                                     | (72) CARLYLE, Tom                               | (11) EP3316856                                      |
| (47) 16.06.2021                                                                                | EINZMANN, Mirko                                 | (21) EP16733592.6                                   |
| (51) A61J 9/04                                                                                 | GOLDHALM, Gisela                                | (22) 30.06.2016                                     |
| (11) EP3104827                                                                                 | HAYHURST, Malcolm John                          | (54) BLENDED FORMULATIONS                           |
| (21) EP15749535.9                                                                              | MAYER, Katharina                                | (73) Sequestrum Technology Holdings Limited         |
| (22) 16.02.2015                                                                                | SAGERER-FORIC, Ibrahim                          | (72) HENRY, William                                 |
| (54) VENTED LIQUID CONTAINER                                                                   | (74) ir. M.F.J.M. Ketelaars c.s.                | GARRAWAY, Richard Wolf                              |
| (73) T.T.Y. General Trade Lines Ltd.                                                           | (31) 17164645                                   | (74) ir. M.F.J.M. Ketelaars c.s.                    |
| (72) BERKOVITCH, Amikam                                                                        | (32) 03.04.2017                                 | (31) 201511478                                      |
| (74) dr. W.A.H.M. Van Borm                                                                     | (33) European Patent Office (EPO)               | 201511469                                           |
| (31) 201461940440 P                                                                            | (47) 05.05.2021                                 | (32) 30.06.2015                                     |
| (32) 16.02.2014                                                                                | (51) A61K 8/04                                  | 30.06.2015                                          |
| (33) United States of America                                                                  | A61K 8/22                                       | (33) United Kingdom                                 |
| (47) 07.04.2021                                                                                | A61K 8/49                                       | United Kingdom                                      |
| (51) A61K 8/00                                                                                 | A61N 5/06                                       | (47) 07.04.2021                                     |
| A61K 9/00                                                                                      | A61P 1/02                                       | (51) A61K 8/73                                      |
| A61K 36/53                                                                                     | A61P 17/00                                      | C08B 37/00                                          |
| A61P 17/14                                                                                     | A61P 17/02                                      | C08B 37/08                                          |
| (11) EP3568146                                                                                 | A61P 17/10                                      | C08H 1/00                                           |
| (21) EP18702926.9                                                                              | A61P 29/00                                      | C08L 5/12                                           |
| (22) 11.01.2018                                                                                | A61P 43/00                                      | C12N 5/00                                           |
| (54) VEGETABLE EXTRACT TO PREVENT AND TREAT HAIR LOSS                                          | A61Q 19/00                                      | (11) EP2744832                                      |
| (73) Giuliani S.p.A.                                                                           | A61Q 19/08                                      | (21) EP12777854.6                                   |
| (72) GIULIANI, Giammaria                                                                       | C09B 11/28                                      | (22) 17.08.2012                                     |
| BENEDUSI, Anna                                                                                 | A61K 41/00                                      | (54) MATRICES COMPRISING A MODIFIED POLYSACCHARIDE  |
| MARZANI, Barbara                                                                               | (11) EP3150226                                  | (73) Albert-Ludwigs-Universität Freiburg            |
| (74) J.M.H. Duyver lic.                                                                        | (21) EP16178316.2                               | (72) SHASTRI, V. Prasad                             |
| (31) 201700003045                                                                              | (22) 19.04.2013                                 | FORGET, Aurelien                                    |
| (32) 12.01.2017                                                                                | (54) BIOPHOTONIC COMPOSITIONS, KITS AND METHODS | (74) ir. W.J.J.M. Kempes                            |
| (33) Italy                                                                                     | (73) Klox Technologies Inc.                     | (31) 201161524782 P                                 |
| (47) 07.04.2021                                                                                | (72) Loupis, Nikolaos                           | 11177886                                            |
| (51) A61K 8/02                                                                                 | Piergallini, Remigio                            | (32) 18.08.2011                                     |
| A61K 8/81                                                                                      | Rastogi, Shipra                                 | 18.08.2011                                          |
| A61K 9/20                                                                                      | (74) J.M.H. Duyver lic.                         | (33) United States of America                       |
| A61L 9/01                                                                                      | (31) 201261636480 P                             | European Patent Office (EPO)                        |
| A61Q 13/00                                                                                     | 201261636574 P                                  | (47) 21.04.2021                                     |
| C11D 3/37                                                                                      | 201261636577 P                                  | (51) A61K 9/00                                      |
| C11D 3/50                                                                                      | 201261701510 P                                  | A61K 9/06                                           |
| A23L 27/00                                                                                     | 201261701502 P                                  | A61K 9/08                                           |
| (11) EP3365421                                                                                 | 201261701513 P                                  | A61K 31/353                                         |
| (21) EP16781432.6                                                                              | 201361766611 P                                  | A61P 9/10                                           |
| (22) 13.10.2016                                                                                | 201313830488                                    | A61P 27/02                                          |
| (54) SOLID SOLUTIONS OF ODORIFEROUS SUBSTANCES AND FLAVORING AGENTS WITH VINYL LACTAM POLYMERS | (32) 20.04.2012                                 | A61P 27/06                                          |
| (73) BASF SE                                                                                   | 20.04.2012                                      | A61P 27/12                                          |
| (72) KOLTER, Karl                                                                              | 14.09.2012                                      | (11) EP3261635                                      |
| PELZER, Ralf                                                                                   | 14.09.2012                                      | (21) EP16754769.4                                   |
| KARL, Matthias                                                                                 | 19.02.2013                                      | (22) 25.02.2016                                     |
| (74) ir. W.J.J.M. Kempes                                                                       | 14.03.2013                                      | (54) BENZENE COMPOUNDS FOR TREATING OCULAR DISEASES |
| (31) 15191156                                                                                  | (33) United States of America                   | (73) NatureWise Biotech & Medicals Corporation      |
| (32) 23.10.2015                                                                                | United States of America                        | (72) LIAO, Chichou                                  |
| (33) European Patent Office (EPO)                                                              | United States of America                        | (74) ir. M.B. Plaggenborg                           |
| (47) 21.04.2021                                                                                | United States of America                        | (31) 201514632866                                   |
| (51) A61K 8/02                                                                                 | United States of America                        | (32) 26.02.2015                                     |
| D01F 2/00                                                                                      | United States of America                        | (33) United States of America                       |
| D04H 3/02                                                                                      | United States of America                        | (47) 31.03.2021                                     |
| D04H 3/013                                                                                     | (47) 07.04.2021                                 | (51) A61K 9/00                                      |
| D04H 3/11                                                                                      | (51) A61K 8/43                                  | A61K 9/08                                           |
| (11) EP3607124                                                                                 | A61K 9/00                                       | A61K 31/70                                          |
| (21) EP18713246.9                                                                              | A61K 9/10                                       | A61K 31/7042                                        |
| (22) 28.03.2018                                                                                | A61K 9/127                                      | A61K 38/14                                          |
| (54) NONWOVEN CELLULOSE FIBER FABRIC WITH DIFFERENT SETS OF PORES                              | A61K 31/155                                     | A61K 47/02                                          |
| (73) Lenzing Aktiengesellschaft                                                                | A61K 47/24                                      | A61K 47/12                                          |
|                                                                                                | A61K 47/26                                      | A61P 31/04                                          |
|                                                                                                | A61P 17/00                                      | C07K 9/00                                           |

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| A61K 47/10                           | INFLAMMATORY SOLUTIONS FOR           | A61K 39/395                          |
| (11) EP3402463                       | INJECTION                            | A61K 45/06                           |
| (21) EP17739023.4                    | (73) Omeros Corporation              | A61P 35/00                           |
| (22) 13.01.2017                      | (72) DEMOPULOS, Gregory, A.          | A61P 37/04                           |
| (54) FORMULATIONS OF VANCOMYCIN      | SHEN, Hui-Rong                       | A61P 43/00                           |
| (73) SciDose Pharma LLC              | TEDFORD, Clark, E.                   | C07K 16/22                           |
| (72) PALEPU, Nagesh R.               | (74) ir. W.J.J.M. Kempes             | C07K 16/28                           |
| BUXTON, Philip Christopher           | (31) 201261718026 P                  | C07K 16/30                           |
| (74) dr. A. Ellens c.s.              | 201261736179 P                       | C07K 16/44                           |
| (31) 201662279210 P                  | (32) 24.10.2012                      | (11) EP3166616                       |
| (32) 15.01.2016                      | 12.12.2012                           | (21) EP15818863.1                    |
| (33) United States of America        | (33) United States of America        | (22) 10.07.2015                      |
| (47) 14.04.2021                      | United States of America             | (54) BETA-GLUCAN IN COMBINATION WITH |
| (51) A61K 9/00                       | (47) 14.04.2021                      | ANTI-CANCER AGENTS AFFECTING         |
| A61K 9/08                            | (51) A61K 9/00                       | THE TUMOR MICROENVIRONMENT           |
| A61K 38/16                           | A61K 31/137                          | (73) Biothera, Inc.                  |
| A61K 47/18                           | A61K 31/4709                         | (72) BOSE, Nandita                   |
| (11) EP3532029                       | A61P 13/00                           | GORDEN, Keith                        |
| (21) EP17797579.4                    | A61P 15/12                           | CHAN, Anissa SH.                     |
| (22) 30.10.2017                      | A61P 21/00                           | LEONARDO, Steven                     |
| (54) LIQUID PHARMACEUTICAL           | A61P 25/00                           | GRAFF, Jeremy                        |
| COMPOSITION                          | A61P 25/06                           | QIU, Xiaohong                        |
| (73) Fresenius Kabi Deutschland GmbH | A61P 25/16                           | KANGAS, Takashi                      |
| (72) JEZEK, Jan                      | A61P 25/18                           | FRASER, Kathryn A.                   |
| BADIALI, Luca                        | A61P 25/20                           | BYKOWSKI JONAS, Adria                |
| GERRING, David                       | A61P 25/22                           | OTTOSON, Nadine                      |
| (74) ir. F.A. Geurts c.s.            | A61P 25/24                           | (74) ir. M.F.J.M. Ketelaars c.s.     |
| (31) 16196625                        | A61P 25/28                           | (31) 201462022754 P                  |
| (32) 31.10.2016                      | A61P 29/00                           | 201462076094 P                       |
| (33) European Patent Office (EPO)    | (11) EP3322412                       | 201562115895 P                       |
| (47) 28.04.2021                      | (21) EP16739475.8                    | 201562149892 P                       |
| (51) A61K 9/00                       | (22) 15.07.2016                      | (32) 10.07.2014                      |
| A61K 31/135                          | (54) USE OF AMITRIPTYLINE FOR        | 06.11.2014                           |
| A61K 31/565                          | BLOCKING BRAIN HEMICHANNELS          | 13.02.2015                           |
| A61P 15/00                           | AND METHOD FOR POTENTIATING          | 20.04.2015                           |
| (11) EP3452047                       | ITS EFFECT IN VIVO                   | (33) United States of America        |
| (21) EP17792282.0                    | (73) Theranexus                      | United States of America             |
| (22) 01.05.2017                      | (72) JEANSON, Tiffany                | United States of America             |
| (54) COMPOSITIONS COMPRISING         | CHARVERIAT, Mathieu                  | United States of America             |
| ESTRIOL AND AMITRIPTYLINE            | MOUTHON, Franck                      | (47) 07.04.2021                      |
| OR NORTRIPTYLINE FOR THE             | (74) ir. F.A. Geurts c.s.            | (51) A61K 9/107                      |
| TREATMENT OF CHRONIC VULVAL          | (31) 15290186                        | A61K 9/51                            |
| AND PERINEAL PAIN AND SYMPTOMS       | (32) 15.07.2015                      | A61K 47/32                           |
| AND CONDITIONS ASSOCIATED            | (33) European Patent Office (EPO)    | A61P 35/00                           |
| THEREWITH                            | (47) 07.04.2021                      | A61K 47/34                           |
| (73) TA Pharma Pty Ltd               | (51) A61K 9/00                       | (11) EP2723388                       |
| (72) VANCAILLIE, Thierry             | A61K 31/405                          | (21) EP12732887.0                    |
| HEWITT, Alan                         | A61K 31/4709                         | (22) 26.06.2012                      |
| (74) J.M.H. Duyver lic.              | A61P 25/00                           | (54) CONTROLLED RELEASE SYSTEM       |
| (31) 2016901605                      | (11) EP3102209                       | (73) Cristal Delivery B.V.           |
| (32) 02.05.2016                      | (21) EP15705756.3                    | (72) RIJCKEN, Cristianne, Johanna,   |
| (33) Australia                       | (22) 04.02.2015                      | Ferdinand                            |
| (47) 07.04.2021                      | (54) USE OF FLAP INHIBITORS TO       | STIGTER, Martin                      |
| (51) A61K 9/00                       | REDUCE NEUROINFLAMMATION             | HOLTHUIS, Josephus, Johannes, Maria  |
| A61K 31/137                          | MEDIATED INJURY IN THE CENTRAL       | (74) ir. H.A. Witmans c.s.           |
| A61K 31/138                          | NERVOUS SYSTEM                       | (31) 201161501288 P                  |
| A61K 31/407                          | (73) Bioscience Pharma Partners, LLC | (32) 27.06.2011                      |
| A61P 27/02                           | (72) HEIDENREICH, Kim, A.            | (33) United States of America        |
| A61P 27/04                           | MURPHY, Robert, C.                   | (47) 14.04.2021                      |
| A61P 27/08                           | (74) ir. H.A. Witmans c.s.           | (51) A61K 9/127                      |
| A61P 29/00                           | (31) 201461935763 P                  | (11) EP2950784                       |
| A61P 41/00                           | (32) 04.02.2014                      | (21) EP14745929.1                    |
| (11) EP2911511                       | (33) United States of America        | (22) 03.02.2014                      |
| (21) EP13848382.1                    | (47) 07.04.2021                      | (54) REMOTE LOADING OF SPARINGLY     |
| (22) 23.10.2013                      | (51) A61K 9/00                       | WATER-SOLUBLE DRUGS INTO             |
| (54) STABLE PRESERVATIVE-            | A61K 31/715                          | LIPOSOMES                            |
| FREE MYDRIATIC AND ANTI-             | A61K 31/716                          | (73) Zoneone Pharma, Inc.            |
|                                      | A61K 39/00                           | (72) HAYES, Mark, E.                 |



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| NOBLE, Charles, O.<br>SZOKA, Francis, C., Jr.<br>(74) dr. A. Krebs<br>(31) 201361759914 P<br>(32) 01.02.2013<br>(33) United States of America<br>(47) 07.04.2021                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | (51) A61K 9/16<br>A61K 31/198<br>A61P 35/00<br>(11) EP3060200<br>(21) EP14802529.9<br>(22) 21.10.2014<br>(54) TYROSINE DERIVATIVES AND<br>COMPOSITIONS COMPRISING THEM<br>(73) Tyme, Inc.<br>(72) HOFFMAN, Steven<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 201361894279 P<br>201314062194<br>(32) 22.10.2013<br>24.10.2013<br>(33) United States of America<br>United States of America<br>(47) 26.05.2021                                                | (22) 22.03.2016<br>(54) PHARMACEUTICAL COMPOSITION<br>CONTAINING SILYBIN, VE AND L-<br>CARNITINE<br>(73) Tasly Pharmaceutical Group Co., Ltd.<br>(72) SUN, He<br>YAN, Xijun<br>WU, Naifeng<br>YAN, Kaijing<br>ZHU, Yonghong<br>ZHANG, Shunnan<br>BAI, Xiaolin<br>MA, Xiaohui<br>HE, Yi<br>LI, Ting<br>LI, Lei<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 201510128638<br>(32) 23.03.2015<br>(33) China<br>(47) 28.04.2021                                                                                                                                                                                                                                                                                        |
| (51) A61K 9/127<br>A61K 9/51<br>A61K 31/166<br>A61K 31/713<br>A61K 47/06<br>C07C 237/00<br>(11) EP3297637<br>(21) EP16797375.9<br>(22) 20.05.2016<br>(54) BENZENE-1,3,5-TRICARBOXAMIDE<br>DERIVATIVES AND USES THEREOF<br>(73) Ohio State Innovation Foundation<br>(72) DONG, Yizhou<br>LI, Bin<br>(74) dr. W.A.H.M. Van Borm<br>(31) 201562164891 P<br>(32) 21.05.2015<br>(33) United States of America<br>(47) 26.05.2021                                                                                                                                                                                                                                                                                                                                                                                    | (51) A61K 9/19<br>A61K 31/4965<br>A61P 9/12<br>A61P 17/02<br>A61K 47/10<br>(11) EP3592391<br>(21) EP18711258.6<br>(22) 07.03.2018<br>(54) PHARMACEUTICAL COMPOSITION<br>COMPRISING SELEXIPAG<br>(73) Actelion Pharmaceuticals Ltd<br>(72) HELLERBRAND, Klaus<br>SCHLICKER-SPAIN, Alexandra<br>(74) ir. W.J.J.M. Kempes<br>(31) PCT/EP2017/055406<br>(32) 08.03.2017<br>(33) World Intellectual Property Office (WIPO)<br>(47) 21.04.2021                     | (51) A61K 9/28<br>A61K 31/19<br>A61P 1/00<br>A61P 1/04<br>A61P 1/06<br>A61P 29/00<br>A61P 31/04<br>A61P 35/00<br>C12N 15/52<br>C12P 7/42<br>C12P 7/52<br>C12P 7/54<br>A61K 35/742<br>A23K 10/18<br>A23L 33/135<br>(11) EP3515429<br>(21) EP17777342.1<br>(22) 21.09.2017<br>(54) COMPOSITIONS COMPRISING<br>GENETICALLY ENGINEERED<br>ANAEROBIC BACTERIA WHICH<br>PRODUCE (R)-3-HYDROXYBUTYRATE<br>AND USES THEREOF FOR TREATING<br>INFLAMMATORY DISEASES<br>(73) Chain Biotechnology Limited<br>(72) BRADLEY, Benjamin<br>GREEN, Edward<br>HEEG, Daniela<br>(74) ir. W.J.J.M. Kempes<br>(31) 201616058<br>201706751<br>(32) 21.09.2016<br>27.04.2017<br>(33) United Kingdom<br>United Kingdom<br>(47) 07.04.2021 |
| (51) A61K 9/14<br>A61K 31/167<br>A61K 31/19<br>A61K 31/198<br>A61K 31/352<br>A61K 31/405<br>A61K 45/06<br>A61K 47/40<br>A61P 1/00<br>A61P 1/04<br>A61P 1/12<br>A61P 3/02<br>A61P 25/00<br>A61P 25/18<br>A61P 29/00<br>A61P 43/00<br>C08B 37/16<br>C08L 5/16<br>C12N 9/10<br>A61K 47/69<br>(11) EP3411047<br>(21) EP17748308.8<br>(22) 03.02.2017<br>(54) CONTROLLED-RELEASE AND<br>STRATIFIED CYCLODEXTRIN<br>INCLUSION COMPLEX VEHICLES<br>(73) Czap Research And Development, LLC<br>(72) CZAP, AI<br>(74) ir. W.J.J.M. Kempes<br>(31) 201662291202 P<br>201615232647<br>201615285264<br>201762444036 P<br>(32) 04.02.2016<br>09.08.2016<br>04.10.2016<br>09.01.2017<br>(33) United States of America<br>United States of America<br>United States of America<br>United States of America<br>(47) 14.04.2021 | (51) A61K 9/20<br>A61K 9/28<br>A61K 9/48<br>A61K 31/00<br>(11) EP3650016<br>(21) EP19217651.9<br>(22) 14.03.2014<br>(54) STABILIZED MODIFIED RELEASE<br>VITAMIN D FORMULATION AND<br>METHOD OF ADMINISTERING SAME<br>(73) EirGen Pharma Ltd.<br>(72) White, Jay A.<br>Melnick, Joel Z.<br>Agudoawu, Sammy A.<br>Tabash, Samir P.<br>(74) dr. W.A.H.M. Van Borm<br>(31) 201361801896 P<br>(32) 15.03.2013<br>(33) United States of America<br>(47) 05.05.2021 | (51) A61K 9/28<br>A61K 9/48<br>A61K 9/66<br>A61K 31/205<br>A61K 31/355<br>A61K 31/357<br>A61K 31/683<br>A61K 36/82<br>A61K 47/24<br>A61P 1/16<br>(11) EP3275454<br>(21) EP16767755.8<br>(22) 22.03.2016                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

|                                                                                         |                                                                        |                                                                           |
|-----------------------------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------|
| (54) PHARMACEUTICAL COMPOSITION CONTAINING SILYBIN AND L-CARNITINE                      | (33) Italy                                                             | C07H 5/04                                                                 |
| (73) Tasly Pharmaceutical Group Co., Ltd.                                               | (47) 09.06.2021                                                        | C07H 13/04                                                                |
| (72) SUN, He                                                                            | (51) A61K 31/00                                                        | C07H 15/04                                                                |
| YAN, Xijun                                                                              | A61K 31/4545                                                           | (11) EP2968215                                                            |
| WU, Naifeng                                                                             | A61K 31/47                                                             | (21) EP14767630.8                                                         |
| YAN, Kaijing                                                                            | A61K 31/4745                                                           | (22) 14.03.2014                                                           |
| ZHU, Yonghong                                                                           | A61K 31/4985                                                           | (54) THIOSACCHARIDE MUCOLYTIC AGENTS                                      |
| ZHANG, Shunnan                                                                          | A61K 31/53                                                             | (73) The Regents of the University of California                          |
| BAI, Xiaolin                                                                            | A61K 31/5377                                                           | University College Dublin                                                 |
| MA, Xiaohui                                                                             | A61P 35/00                                                             | (72) OSCARSON, Stefan                                                     |
| HE, Yi                                                                                  | C07K 16/28                                                             | FAHY, John Vincent                                                        |
| LI, Ting                                                                                | G01N 33/48                                                             | YUAN, Shaopeng                                                            |
| LI, Lei                                                                                 | G01N 33/574                                                            | CARRINGTON, Stephen                                                       |
| (74) ir. M.F.J.M. Ketelaars c.s.                                                        | C12Q 1/6886                                                            | (74) dr. A. Krebs                                                         |
| (31) 201510128638                                                                       | (11) EP3515418                                                         | (31) 201361784856 P                                                       |
| (32) 23.03.2015                                                                         | (21) EP17777211.8                                                      | (32) 14.03.2013                                                           |
| (33) China                                                                              | (22) 21.09.2017                                                        | (33) United States of America                                             |
| (47) 28.04.2021                                                                         | (54) USE OF C-MET INHIBITORS TO TREAT CANCERS HARBOURING MET MUTATIONS | (47) 05.05.2021                                                           |
| (51) A61K 9/50                                                                          | (73) Astrazeneca AB                                                    | (51) A61K 31/138                                                          |
| A61K 31/137                                                                             | (72) FRIGAULT, Melanie Mae                                             | A61K 31/198                                                               |
| A61K 31/4458                                                                            | (74) ir. W.J.J.M. Kempes                                               | A61K 31/216                                                               |
| (11) EP3272342                                                                          | (31) 201616116                                                         | A61K 31/4184                                                              |
| (21) EP17187023.1                                                                       | (32) 22.09.2016                                                        | A61K 31/437                                                               |
| (22) 23.03.2012                                                                         | (33) United Kingdom                                                    | A61K 31/445                                                               |
| (54) METHODS AND COMPOSITIONS FOR TREATMENT OF ATTENTION DEFICIT DISORDER               | (47) 14.04.2021                                                        | A61K 31/4545                                                              |
| (73) Ironshore Pharmaceuticals & Development, Inc.                                      | (51) A61K 31/045                                                       | A61K 31/495                                                               |
| (72) LICKRISH, David                                                                    | A61K 31/055                                                            | A61K 31/496                                                               |
| ZHANG, Feng                                                                             | A61K 31/085                                                            | A61K 31/498                                                               |
| (74) ir. M.F.J.M. Ketelaars c.s.                                                        | A61K 31/125                                                            | A61K 31/517                                                               |
| (31) 201161466684 P                                                                     | A61K 31/155                                                            | A61K 31/565                                                               |
| 201161561763 P                                                                          | A61K 31/198                                                            | A61K 31/567                                                               |
| 201261591129 P                                                                          | A61K 31/327                                                            | A61K 31/573                                                               |
| (32) 23.03.2011                                                                         | A61K 31/351                                                            | A61K 31/58                                                                |
| 18.11.2011                                                                              | A61K 31/4425                                                           | A61K 45/06                                                                |
| 26.01.2012                                                                              | A61K 31/475                                                            | A61P 25/02                                                                |
| (33) United States of America                                                           | A61K 31/513                                                            | A61P 29/00                                                                |
| United States of America                                                                | A61K 31/519                                                            | A61P 35/00                                                                |
| United States of America                                                                | A61K 31/675                                                            | (11) EP3632469                                                            |
| (47) 26.05.2021                                                                         | A61K 31/704                                                            | (21) EP19200183.2                                                         |
| (51) A61K 9/50                                                                          | A61K 33/40                                                             | (22) 14.08.2015                                                           |
| A61K 31/145                                                                             | A61K 36/00                                                             | (54) CYP2J2 ANTAGONISTS IN THE TREATMENT OF PAIN                          |
| A61P 13/12                                                                              | A61K 36/28                                                             | (73) Fraunhofer Gesellschaft zur Förderung der angewandten Forschung e.V. |
| A61P 25/14                                                                              | A61K 45/06                                                             | (72) Sisignano, Marco                                                     |
| A61P 25/28                                                                              | A61P 1/02                                                              | Brenneis, Christian                                                       |
| A61P 33/06                                                                              | A61P 31/02                                                             | Scholich, Klaus                                                           |
| A61P 35/00                                                                              | A61K 33/24                                                             | Geisslinger, Gerd                                                         |
| A61P 39/02                                                                              | (11) EP2957282                                                         | Zinn, Sebastian                                                           |
| A61P 43/00                                                                              | (21) EP13874464.4                                                      | Parnham, Michael John                                                     |
| (11) EP3429565                                                                          | (22) 07.02.2013                                                        | (74) dr. W.A.H.M. Van Borm                                                |
| (21) EP17712937.6                                                                       | (54) ORAL ANTISEPTIC COMPOSITION FOR TREATING ORAL MUCOSITIS           | (31) 14181086                                                             |
| (22) 14.03.2017                                                                         | (73) Ingalfarma SpA                                                    | 14186624                                                                  |
| (54) PROLONGED RELEASE PHARMACEUTICAL COMPOSITION COMPRISING CYSTEAMINE OR SALT THEREOF | (72) Galván González, Tomás Bernardo                                   | (32) 14.08.2014                                                           |
| (73) Recordati Industria Chimica E Farmaceutica SPA                                     | (74) ir. F.A. Geurts c.s.                                              | 26.09.2014                                                                |
| (72) GAZZANIGA, Andrea                                                                  | (47) 14.04.2021                                                        | (33) European Patent Office (EPO)                                         |
| CEREA, Matteo                                                                           | (51) A61K 31/10                                                        | European Patent Office (EPO)                                              |
| MARONI, Alessandra                                                                      | A61K 31/70                                                             | (47) 28.04.2021                                                           |
| BARCIELLI, Marco                                                                        | A61K 31/7016                                                           | (51) A61K 31/17                                                           |
| (31) UA20161799                                                                         | A61K 31/702                                                            | A61K 31/4418                                                              |
| (32) 18.03.2016                                                                         | A61K 31/7028                                                           | A61K 31/4709                                                              |
|                                                                                         | A61P 11/00                                                             | A61K 31/519                                                               |
|                                                                                         | A61P 11/04                                                             | A61K 33/00                                                                |
|                                                                                         | A61P 11/06                                                             | A61P 9/00                                                                 |
|                                                                                         | A61P 11/12                                                             | A61P 11/00                                                                |
|                                                                                         | A61P 43/00                                                             | A61P 17/00                                                                |
|                                                                                         | C07D 309/10                                                            |                                                                           |

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|--------------------------------------------|----------------------------------|-------------------------------------|
| A61P 43/00                                 | A61K 31/555                      | A61P 9/00                           |
| C01B 21/50                                 | A61K 51/00                       | A61P 9/12                           |
| (11) EP3569237                             | A61P 35/00                       | A61P 11/00                          |
| (21) EP19177863.8                          | A61P 43/00                       | A61P 13/12                          |
| (22) 11.02.2010                            | C07B 59/00                       | C07D 233/64                         |
| (54) SODIUM NITRITE-CONTAINING             | C07D 255/02                      | C07D 233/72                         |
| PHARMACEUTICAL COMPOSITIONS                | C07D 257/02                      | C07D 241/04                         |
| (73) Hope Medical Enterprises, Inc. d.b.a. | C07D 471/04                      | C07D 403/04                         |
| Hope Pharmaceuticals                       | C07F 1/08                        | C07D 403/06                         |
| (72) SHERMAN, Craig                        | C07F 5/00                        | C07D 407/04                         |
| LEPINE, Anthony James                      | (11) EP3275883                   | C07D 407/06                         |
| SMITH, Catherine Marie                     | (21) EP16768957.9                | C07D 409/04                         |
| WIRTZ, Kevin Robert                        | (22) 25.03.2016                  | C07D 409/06                         |
| SCHULZE, Erich                             | (54) METHOD FOR PRODUCING        | C07D 413/04                         |
| (74) J.M.H. Duyver lic.                    | NOVEL NITROGEN-CONTAINING        | C07D 413/06                         |
| (31) 151820 P                              | COMPOUND OR SALT THEREOF, AND    | C07D 417/04                         |
| 224021 P                                   | PRODUCTION INTERMEDIATE OF       | (11) EP3640243                      |
| (32) 11.02.2009                            | SAME                             | (21) EP19212378.4                   |
| 08.07.2009                                 | (73) FUJIFILM Corporation        | (22) 21.09.2017                     |
| (33) United States of America              | (72) FUKUNAGA, Hirofumi          | (54) PIPERAZINE DERIVATIVES FOR THE |
| United States of America                   | SHINJO, Sachiko                  | TREATMENT OF HYPERTENSION           |
| (47) 26.05.2021                            | NAKAGAWA, Daisuke                | AND/OR FIBROSIS                     |
| (51) A61K 31/198                           | SEKINE, Shinichiro               | (73) Vectus Biosystems Limited      |
| A61K 31/375                                | YAMAKAWA, Takayuki               | (72) Duggan, Karen Annette          |
| A61K 31/7008                               | (74) mr.ir. F.N. Ferro           | (74) ir. W.J.J.M. Kempes            |
| A61K 31/728                                | (31) 2015062306                  | (31) 2016903804                     |
| A61K 33/00                                 | (32) 25.03.2015                  | (32) 21.09.2016                     |
| A61K 36/899                                | (33) Japan                       | (33) Australia                      |
| A61K 38/01                                 | (47) 02.06.2021                  | (47) 26.05.2021                     |
| A61K 45/06                                 | (51) A61K 31/416                 | (51) A61K 31/4174                   |
| A61P 19/00                                 | A61K 31/454                      | A61K 31/4439                        |
| A61P 29/00                                 | A61P 19/00                       | A61P 35/00                          |
| A23L 33/10                                 | A61P 19/02                       | C07D 233/64                         |
| (11) EP3381457                             | A61P 19/04                       | C07D 401/04                         |
| (21) EP17163233.4                          | A61P 21/00                       | (11) EP3523283                      |
| (22) 28.03.2017                            | A61P 43/00                       | (21) EP17787774.3                   |
| (54) PHYSIOLOGICALLY ACTIVE                | C07D 231/56                      | (22) 05.10.2017                     |
| COMPOSITION                                | C07D 401/12                      | (54) CRYSTALLINE AND SALT FORMS OF  |
| (73) Natural Products & Drugs GmbH         | C07D 403/12                      | PPAR AGONIST COMPOUNDS              |
| (72) Schantl, Josef                        | C07D 405/12                      | (73) Mitobridge, Inc.               |
| (74) J.M.H. Duyver lic.                    | (11) EP3515894                   | (72) LAGU, Bharat                   |
| (47) 14.04.2021                            | (21) EP17784404.0                | TRZASKA, Scott                      |
| (51) A61K 31/337                           | (22) 21.09.2017                  | (74) drs. C.M.A. Quintelier         |
| A61K 31/7068                               | (54) INDAZOLE COMPOUNDS FOR USE  | (31) 201662404474 P                 |
| A61K 45/06                                 | IN TENDON AND/OR LIGAMENT        | (32) 05.10.2016                     |
| A61P 31/00                                 | INJURIES                         | (33) United States of America       |
| A61P 35/04                                 | (73) Novartis AG                 | (47) 09.06.2021                     |
| (11) EP2943192                             | (72) BURSULAYA, Badry            | (51) A61K 31/4174                   |
| (21) EP14737791.5                          | FISCH, Andreas                   | A61P 23/00                          |
| (22) 10.01.2014                            | LAJINESS, James Paul             | C07D 233/64                         |
| (54) METHODS OF TREATING                   | MACHAUER, Rainer                 | (11) EP3566703                      |
| PANCREATIC CANCER COMPRISING               | MALEKAR, Swapnil                 | (21) EP19168102.2                   |
| PACLITAXEL AND GEMCITABINE                 | PETRASSI, Hank Michael James     | (22) 12.02.2010                     |
| (73) Abraxis BioScience, LLC               | RAMAZANI, Farshad                | (54) PHARMACEUTICAL COMPOSITIONS    |
| (72) DESAI, Neil P.                        | REMOND, Anne-Catherine           | COMPRISING (3-(1-(1H-               |
| RENSCHLER, Markus                          | ULLRICH, Thomas                  | IMIDAZOL-4-YL)ETHYL)-2-             |
| (74) J.M.H. Duyver lic.                    | USSELMANN, Peggy                 | METHYLPHENYL)METHANOL               |
| (31) 201361751820 P                        | VANGREVELINGHE, Eric             | (73) ALLERGAN, INC.                 |
| 201361752355 P                             | (74) ir. M.F.J.M. Ketelaars c.s. | (72) Gil, Daniel W.                 |
| 201313794480                               | (31) 201662398869 P              | (74) mr.ir. F.N. Ferro              |
| (32) 11.01.2013                            | (32) 23.09.2016                  | (31) 152494 P                       |
| 14.01.2013                                 | (33) United States of America    | (32) 13.02.2009                     |
| 11.03.2013                                 | (47) 07.04.2021                  | (33) United States of America       |
| (33) United States of America              | (51) A61K 31/4174                | (47) 07.04.2021                     |
| United States of America                   | A61K 31/4178                     | (51) A61K 31/4184                   |
| United States of America                   | A61K 31/495                      | A61P 35/00                          |
| (47) 12.05.2021                            | A61K 31/496                      | C07D 403/12                         |
| (51) A61K 31/395                           | A61P 1/16                        | (11) EP3484875                      |

|                                    |                                   |                                       |
|------------------------------------|-----------------------------------|---------------------------------------|
| (21) EP17740885.3                  | (11) EP3592734                    | (22) 25.06.2015                       |
| (22) 10.07.2017                    | (21) EP18710011.0                 | (54) METHODS OF MANAGING              |
| (54) PYRAZOLYLAMINO BENZIMIDAZOLE  | (22) 06.03.2018                   | CONDITIONED FEAR WITH                 |
| DERIVATIVES AS JAK INHIBITORS      | (54) AMINE SALT OF (1R,3S)-3-(5-  | NEUROKININ RECEPTOR                   |
| (73) Eli Lilly and Company         | CYANO-4-PHENYL-1,3-THIAZOL-2-     | ANTAGONISTS                           |
| (72) BASTIAN, Jolie Anne           | YL CARBAMOYL)CYCLOPENTANE         | (73) Emory University                 |
| CLAYTON, Joshua Ryan               | CARBOXYLIC ACID                   | (72) RESSLER, Kerry J.                |
| COATES, David Andrew               | (73) Palobiofarma, S.L.           | GALI, Raul Andero                     |
| SALL, Daniel Jon                   | (72) CASTRO PALOMINO LARIA, Julio | (74) ir. M.F.J.M. Ketelaars c.s.      |
| WOODS, Timothy Andrew              | CAMACHO GÓMEZ, Juan               | (31) 201462016683 P                   |
| (74) ir. M.F.J.M. Ketelaars c.s.   | (74) dr. A. Ellens c.s.           | (32) 25.06.2014                       |
| (31) 201662362208 P                | (31) 17382114                     | (33) United States of America         |
| (32) 14.07.2016                    | (32) 06.03.2017                   | (47) 28.04.2021                       |
| (33) United States of America      | (33) European Patent Office (EPO) | (51) A61K 31/46                       |
| (47) 07.04.2021                    | (47) 19.05.2021                   | A61K 31/4748                          |
| (51) A61K 31/4196                  | (51) A61K 31/437                  | A61K 31/497                           |
| A61K 31/422                        | A61P 25/00                        | A61K 31/506                           |
| A61K 31/4412                       | A61P 25/16                        | A61P 1/00                             |
| A61P 25/12                         | A61P 25/18                        | A61P 1/16                             |
| C07D 401/14                        | A61P 25/28                        | (11) EP3419625                        |
| C07D 403/12                        | C07D 471/04                       | (21) EP17709189.9                     |
| C07D 403/14                        | (11) EP3478679                    | (22) 20.02.2017                       |
| C07D 405/14                        | (21) EP17733044.6                 | (54) METHODS FOR USING FXR            |
| C07D 409/14                        | (22) 15.06.2017                   | AGONISTS                              |
| C07D 413/14                        | (54) 5,7-DIHYDRO-PYRROLO-         | (73) Novartis AG                      |
| C07D 417/14                        | PYRIDINE DERIVATIVES FOR          | (72) LAFFITTE, Bryan                  |
| (11) EP3212637                     | TREATING NEUROLOGICAL AND         | BADMAN, Michael                       |
| (21) EP15790229.7                  | NEURODEGENERATIVE DISEASES        | CHEN, Jin                             |
| (22) 30.10.2015                    | (73) Pfizer Inc.                  | LINDGREN, Sam                         |
| (54) DOPAMINE D3 RECEPTOR          | (72) ZHANG, Lei                   | (74) ir. M.F.J.M. Ketelaars c.s.      |
| ANTAGONISTS COMPOUNDS              | BUTLER, Christopher Ryan          | (31) 201662298121 P                   |
| (73) Indivior UK Limited           | BECK, Elizabeth Mary              | 201662420661 P                        |
| (72) CREMONESI, Susanna            | BRODNEY, Michael Aaron            | (32) 22.02.2016                       |
| MICHEL, Fabrizio                   | BROWN, Matthew Frank              | 12.12.2016                            |
| SEMERARO, Teresa                   | MCALLISTER, Laura Ann             | (33) United States of America         |
| TARSI, Luca                        | LACHAPPELLE, Erik Alphonse        | United States of America              |
| (74) dr. A. Krebs                  | GILBERT, Adam Matthew             | (47) 07.04.2021                       |
| (31) 201419430                     | (74) ir. A. Blokland c.s.         | (51) A61K 31/47                       |
| 201419433                          | (31) 201662357624 P               | A61K 31/4725                          |
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| 31.10.2014                         | (32) 01.07.2016                   | C07D 215/233                          |
| (33) United Kingdom                | 09.08.2016                        | C07D 215/38                           |
| United Kingdom                     | (33) United States of America     | C07D 215/48                           |
| (47) 02.06.2021                    | United States of America          | C07D 401/04                           |
| (51) A61K 31/4245                  | (47) 21.04.2021                   | C07D 401/06                           |
| A61P 35/00                         | (51) A61K 31/437                  | C07D 401/12                           |
| C07D 271/06                        | A61P 31/12                        | C07D 413/04                           |
| (11) EP3549936                     | C07D 487/04                       | C07D 417/04                           |
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| (54) 1,2,4-OXADIAZOLE BENZOIC ACID | (22) 04.04.2018                   | (22) 07.02.2017                       |
| COMPOUND AND ITS USE FOR           | (54) HETEROAROMATIC COMPOUNDS     | (54) QUINOLINONE LYSYL OXIDASE-LIKE 2 |
| NONSENSE SUPPRESSION AND THE       | USEFUL IN THERAPY                 | INHIBITORS AND USES THEREOF           |
| TREATMENT OF DISEASE               | (73) CUROVIR AB                   | (73) Pharmakea, Inc.                  |
| (73) PTC Therapeutics, Inc.        | (72) WESTMAN, Jacob               | (72) ROWBOTTOM, Martin W.             |
| (72) Karp, Gary Mitchell           | (74) J.M.H. Duyver lic.           | HUTCHINSON, John Howard               |
| Hwang, Seongwoo                    | (31) 17165082                     | (74) dr. A. Krebs                     |
| Chen, Guangming                    | (32) 05.04.2017                   | (31) 201662293248 P                   |
| Almstead, Neil Gregory             | (33) European Patent Office (EPO) | (32) 09.02.2016                       |
| Moon, Young-Choon                  | (47) 26.05.2021                   | (33) United States of America         |
| (74) J.M.H. Duyver lic.            | (51) A61K 31/444                  | (47) 16.06.2021                       |
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| (51) A61K 31/426                   | A61P 25/00                        | C07D 401/14                           |
| A61P 9/00                          | (11) EP3160469                    | C07D 403/10                           |
| C07D 277/56                        | (21) EP15811219.3                 | C07D 403/12                           |

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| C07D 405/12                                    | (72) BURNS, Christopher, J.       | HUERTA-ANGELES, Gloria            |
| C07D 413/14                                    | DAIGLE, Denis                     | NESPOROVA, Kristina               |
| C07D 417/12                                    | LIU, Bin                          | SLESINGROVA, Klara                |
| C07D 417/14                                    | MCGARRY, Daniel                   | MINARIK, Antonin                  |
| C07D 471/10                                    | PEVEAR, Daniel C.                 | CHMELAR, Josef                    |
| C07D 487/10                                    | TROUT, Robert E. Lee              | SULAKOVA, Romana                  |
| (11) EP3386511                                 | (74) ir. W.J.J.M. Kempes          | KAREL, Sergej                     |
| (21) EP16874024.9                              | (31) 201261734900 P               | VELEBNY, Vladimir                 |
| (22) 11.12.2016                                | 201361783238 P                    | (74) ir. J.C. Volmer c.s.         |
| (54) METHODS FOR TREATING                      | (32) 07.12.2012                   | (31) 20150166                     |
| HUNTINGTON'S DISEASE                           | 14.03.2013                        | (32) 09.03.2015                   |
| (73) PTC Therapeutics, Inc.                    | (33) United States of America     | (33) Czech Republic               |
| (72) BABU, Suresh                              | United States of America          | (47) 14.04.2021                   |
| BHATTACHARYYA, Anuradha                        | (47) 14.04.2021                   | (51) A61K 36/28                   |
| HWANG, Seongwoo                                | (51) A61K 31/702                  | A61P 17/00                        |
| JANI, Minakshi                                 | A61P 43/00                        | A61P 31/10                        |
| MOON, Young-choon                              | (11) EP3185874                    | A61P 37/00                        |
| SYDORENKO, Nadiya                              | (21) EP15762769.6                 | (11) EP3355900                    |
| (74) J.M.H. Duyver lic.                        | (22) 28.08.2015                   | (21) EP15890159.5                 |
| (31) 201562265652 P                            | (54) METHOD OF IMPROVING OR       | (22) 09.07.2015                   |
| (32) 10.12.2015                                | ENHANCING GROWTH AT AN            | (54) A GYNURA PROCUMBENS OIL      |
| (33) United States of America                  | ADULT AGE OF AN OFFSPRING BY      | EXTRACT FOR THE TREATMENT         |
| (47) 12.05.2021                                | ADMINISTRATION OF FOS             | OF SEVERAL DERMATOLOGICAL         |
| (51) A61K 31/519                               | (73) Beghin Meiji SA              | DISEASES AND ITS PROCESS          |
| A61K 47/34                                     | (72) APPER, Emmanuelle            | THEREOF                           |
| (11) EP2529756                                 | RESPONDEK, Frédérique             | (73) Kostas, Grigoriou, M., D.    |
| (21) EP12170362.3                              | (74) dr. A. Krebs                 | (72) Kostas, Grigoriou, M., D.    |
| (22) 31.05.2012                                | (31) 14182957                     | (74) J.M.H. Duyver lic.           |
| (54) Risperidone and/or Paliperidone implant   | (32) 29.08.2014                   | (47) 26.05.2021                   |
| formulation                                    | (33) European Patent Office (EPO) | (51) A61K 38/00                   |
| (73) LABORATORIOS FARMACEUTICOS                | (47) 28.04.2021                   | A61K 38/18                        |
| ROVI, S.A.                                     | (51) A61K 31/7088                 | A61K 45/06                        |
| (72) Gutierro Aduriz, Ibon                     | A61P 13/12                        | C07K 14/50                        |
| Franco Rodriguez, Guillermo                    | G01N 33/50                        | A61K 47/60                        |
| (74) ir. W.J.J.M. Kempes                       | (11) EP3065744                    | A61K 47/64                        |
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| (32) 31.05.2011                                | (54) A CCL2 ANTAGONIST FOR USE IN | (22) 23.10.2015                   |
| 31.05.2011                                     | TREATING PROTEINURIA              | (54) MODIFIED FGF-21 POLYPEPTIDES |
| (33) World Intellectual Property Office (WIPO) | (73) Noxxon Pharma AG             | AND USES THEREOF                  |
| World Intellectual Property Office (WIPO)      | (72) EULBERG, Dirk                | (73) Bristol-Myers Squibb Company |
| (47) 19.05.2021                                | BAUMANN, Matthias                 | (72) MORIN, Paul E.               |
| (51) A61K 31/675                               | (74) ir. M.F.J.M. Ketelaars c.s.  | COHEN, Daniel                     |
| A61K 39/00                                     | (31) 13005191                     | MUKHERJEE, Ranjan                 |
| A61K 39/39                                     | 14001242                          | REILLY, Timothy P.                |
| A61P 35/00                                     | (32) 04.11.2013                   | CHRISTIAN, Rose C.                |
| (11) EP3421047                                 | 03.04.2014                        | LIPOVSEK, Dasa                    |
| (21) EP18188268.9                              | (33) European Patent Office (EPO) | CAMPHAUSEN, Ray                   |
| (22) 27.03.2013                                | European Patent Office (EPO)      | KRUPINSKI, John                   |
| (54) METHOD FOR IMPROVING THE                  | (47) 21.04.2021                   | (74) ir. H.A. Witmans c.s.        |
| EFFICACY OF A SURVIVIN VACCINE                 | (51) A61K 31/728                  | (31) 201462068523 P               |
| IN THE TREATMENT OF CANCER                     | A61K 45/06                        | 201462068514 P                    |
| (73) ImmunoVaccine Technologies Inc.           | A61L 27/20                        | 201462068526 P                    |
| (72) MANSOUR, Marc                             | A61L 27/54                        | 201462068534 P                    |
| BERINSTEIN, Neil L.                            | C08B 37/08                        | 201462068296 P                    |
| WEIR, Genevieve Mary                           | C08J 3/02                         | 201562141337 P                    |
| STANFORD, Marianne M.                          | C08J 5/18                         | 201562141383 P                    |
| (74) dr. W.A.H.M. Van Borm                     | C08L 5/08                         | (32) 24.10.2014                   |
| (47) 05.05.2021                                | (11) EP3268414                    | 24.10.2014                        |
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| A61K 45/06                                     | (22) 09.03.2016                   | 24.10.2014                        |
| A61P 31/04                                     | (54) SELF-SUPPORTING,             | 24.10.2014                        |
| C07F 5/02                                      | BIODEGRADABLE FILM BASED ON       | 01.04.2015                        |
| (11) EP2928898                                 | HYDROPHOBIZED HYALURONIC ACID,    | 01.04.2015                        |
| (21) EP13861198.3                              | METHOD OF PREPARATION AND USE     | (33) United States of America     |
| (22) 05.12.2013                                | THEREOF                           | United States of America          |
| (54) BETA-LACTAMASE INHIBITORS                 | (73) Contipro a.s.                | United States of America          |
| (73) Venatorx Pharmaceuticals, Inc.            | (72) DUSANKOVA, Marcela           | United States of America          |

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| United States of America       | A61P 29/00                         | (73) D&D Pharmatech Inc.          |
| United States of America       | A61P 31/04                         | (72) LEE, Kang, Choon             |
| United States of America       | A61P 35/00                         | (74) drs. C.M.A. Quintelier       |
| (47) 12.05.2021                | A61P 43/00                         | (31) 201461982207 P               |
| (51) A61K 38/00                | C07K 14/54                         | 201461990530 P                    |
| A61K 48/00                     | (11) EP3226888                     | 201514645276                      |
| C07H 21/02                     | (21) EP15832692.6                  | (32) 21.04.2014                   |
| C07H 21/04                     | (22) 01.12.2015                    | 08.05.2014                        |
| C12N 15/11                     | (54) ADMINISTRATION OF A SELECTIVE | 11.03.2015                        |
| C12N 15/82                     | IL-6-TRANS-SIGNALING INHIBITOR     | (33) United States of America     |
| C12N 15/85                     | (73) Ferring B.V.                  | United States of America          |
| C12N 15/86                     | (72) COTTINGHAM, Ian               | United States of America          |
| C12P 19/34                     | PETRI, Niclas, Axel                | (47) 07.04.2021                   |
| C12N 15/113                    | (74) ir. W.J.J.M. Kempes           | (51) A61K 38/26                   |
| A61K 47/54                     | (31) 201462086054 P                | A61K 45/06                        |
| C12Q 1/68                      | (32) 01.12.2014                    | A61P 3/04                         |
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| (21) EP17209752.9              | (47) 21.04.2021                    | C07K 17/00                        |
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| (54) RNA INTERFERENCE MEDIATED | C07K 14/00                         | (21) EP18205668.9                 |
| INHIBITION OF GENE EXPRESSION  | C12N 15/11                         | (22) 15.06.2012                   |
| USING SHORT INTERFERING        | C12N 15/62                         | (54) A CONJUGATE COMPRISING       |
| NUCLEIC ACID (SINA)            | C12N 15/64                         | OXYNTOMODULIN AND AN              |
| (73) Sirna Therapeutics, Inc.  | (11) EP3394266                     | IMMUNOGLOBULIN FRAGMENT, AND      |
| (72) MCSWIGGEN, James          | (21) EP16828736.5                  | USE THEREOF                       |
| BEIGELMAN, Leonid              | (22) 22.12.2016                    | (73) Hanmi Science Co., Ltd.      |
| CHOWRIRA, Bharat               | (54) NUCLEIC ACIDS ENCODING        | (72) Jung, Sung Youb              |
| PAVCO, Pamela                  | REPETITIVE AMINO ACID              | Kim, Dae Jin                      |
| FOSNAUGH, Kathy                | SEQUENCES RICH IN PROLINE AND      | Park, Sung Hee                    |
| JAMISON, Sharon                | ALANINE RESIDUES THAT HAVE         | Woo, Young Eun                    |
| USMAN, Nassim                  | LOW REPETITIVE NUCLEOTIDE          | Choi, In Young                    |
| THOMPSON, James                | SEQUENCES                          | Kwon, Se Chang                    |
| (74) drs. C.M.A. Quintelier    | (73) XL-protein GmbH               | (74) dr. W.A.H.M. Van Borm        |
| (31) 358580 P                  | Technische Universität München     | (31) 20110058852                  |
| 363124 P                       | (72) BINDER, Uli                   | (32) 17.06.2011                   |
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| 406784 P                       | SKERRA, Arne                       | (47) 07.04.2021                   |
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| 05.09.2002                     | A61K 47/68                         | A61K 47/68                        |
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| United States of America       | (54) DOSING REGIMENS FOR ANTI-TF-  | (54) FACTOR VIII-FC CHIMERIC AND  |
| United States of America       | ANTIBODY DRUG-CONJUGATES           | HYBRID POLYPEPTIDES, AND          |
| United States of America       | (73) Genmab A/S                    | METHODS OF USE THEREOF            |
| United States of America       | (72) LISBY, Steen                  | (73) Bioverativ Therapeutics Inc. |
| United States of America       | WHITING, Nancy Cherry              | (72) DUMONT, Jennifer, A.         |
| United States of America       | (74) ir. F.A. Geurts c.s.          | LOW, Susan                        |
| (47) 07.04.2021                | (31) 201562217320 P                | BITONTI, Alan, J.                 |
| (51) A61K 38/00                | (32) 11.09.2015                    | PIERCE, Glenn                     |
| A61P 1/00                      | (33) United States of America      | LUK, Alvin                        |
| A61P 1/04                      | (47) 05.05.2021                    | JIANG, Haiyan                     |
| A61P 3/06                      | (51) A61K 38/17                    | MCKINNEY, Byron                   |
| A61P 7/00                      | A61P 1/16                          | OTTMER, Matt                      |
| A61P 9/00                      | A61P 1/18                          | SOMMER, Jurg M.                   |
| A61P 9/10                      | A61P 11/00                         | NUGENT, Karen                     |
| A61P 13/12                     | A61P 17/02                         | LI, Lian                          |
| A61P 17/06                     | (11) EP3145530                     | PETERS, Robert                    |
| A61P 19/02                     | (21) EP15721078.2                  | (74) ir. W.J.J.M. Kempes          |
| A61P 19/10                     | (22) 17.04.2015                    | (31) 267070 P                     |
| A61P 27/00                     | (54) TRAIL RECEPTOR AGONISTS FOR   | 285054 P                          |
| A61P 27/02                     | TREATMENT OF FIBROTIC DISEASES     | 301592 P                          |

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| 373113 P                                | (21) EP18206830.4                    | (33) United States of America           |
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| 12.08.2010                              | IOFFE, Ella                          | (21) EP17703212.5                       |
| 07.11.2010                              | BUROVA, Elena                        | (22) 26.01.2017                         |
| 03.12.2010                              | (74) ir. M.F.J.M. Ketelaars c.s.     | (54) ATTENUATED INFECTIOUS              |
| (33) United States of America           | (31) 201461930582 P                  | BRONCHITIS VIRUS                        |
| United States of America                | 201462089549 P                       | (73) The Pirbright Institute            |
| United States of America                | (32) 23.01.2014                      | (72) BICKERTON, Erica                   |
| United States of America                | 09.12.2014                           | KEEP, Sarah                             |
| United States of America                | (33) United States of America        | BRITTON, Paul                           |
| United States of America                | United States of America             | (74) ir. W.J.J.M. Kempes                |
| United States of America                | (47) 02.06.2021                      | (31) 201601498                          |
| (47) 07.04.2021                         | (51) A61K 39/00                      | (32) 27.01.2016                         |
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| A61K 39/29                              | C07K 14/47                           | (47) 23.06.2021                         |
| A61P 1/16                               | C07K 16/18                           | (51) A61K 39/00                         |
| A61P 31/20                              | C12N 5/10                            | C07K 16/28                              |
| A61K 35/16                              | C12N 15/09                           | (11) EP2914627                          |
| (11) EP3148574                          | C12N 5/078                           | (21) EP13786884.0                       |
| (21) EP15799654.7                       | C12N 5/0783                          | (22) 30.10.2013                         |
| (22) 28.05.2015                         | (11) EP3556857                       | (54) ANTI-CD40 ANTIBODIES AND           |
| (54) PURIFIED COMPOSITIONS OF IVIG      | (21) EP19175920.8                    | METHODS OF USE                          |
| AND KH PROTEINS FOR MODULATING          | (22) 25.05.2010                      | (73) Apexigen, Inc.                     |
| LYMPHOCYTES AND TREATING                | (54) CDC45L PEPTIDES AND VACCINES    | (72) ZHANG, Yongke                      |
| HEPATITIS B VIRUS                       | INCLUDING THE SAME                   | YU, Guo-Liang                           |
| (73) Rare Antibody Antigen Supply, Inc. | (73) Oncotherapy Science, Inc.       | ZHU, Weimin                             |
| (72) HOANG, Kieu                        | (72) NISHIMURA Yasuharu              | (74) mr. ir. J. van Breda c.s.          |
| (74) ir. W.J.J.M. Kempes                | TOMITA Yusuke                        | (31) 201261720289 P                     |
| (31) 201462003664 P                     | NAKAMURA Yusuke                      | (32) 30.10.2012                         |
| (32) 28.05.2014                         | TSUNODA Takuya                       | (33) United States of America           |
| (33) United States of America           | (74) ir. W.J.J.M. Kempes             | (47) 07.04.2021                         |
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| A61K 48/00                              | (47) 05.05.2021                      | C12N 1/20                               |
| C07K 14/705                             | (51) A61K 39/00                      | C12N 15/09                              |
| C07K 16/00                              | A61P 37/06                           | (11) EP3254693                          |
| C07K 16/28                              | C07J 71/00                           | (21) EP16743468.7                       |
| (11) EP3166636                          | C07K 16/18                           | (22) 28.01.2016                         |
| (21) EP15819318.5                       | C07K 16/24                           | (54) LACTIC-ACID-BACTERIA-              |
| (22) 08.07.2015                         | A61K 47/68                           | CONTAINING COMPOSITION, ORAL            |
| (54) PSGL-1 MODULATORS AND USES         | (11) EP3464318                       | PHARMACEUTICAL COMPOSITION              |
| THEREOF                                 | (21) EP17733222.8                    | FOR TREATING HPV INFECTION AND/         |
| (73) Sanford-Burnham Medical Research   | (22) 01.06.2017                      | OR HPV-ASSOCIATED TUMORS,               |
| Institute                               | (54) GLUCOCORTICOID RECEPTOR         | AND MUCOSAL IMMUNITY-INDUCING           |
| (72) BRADLEY, Linda, M.                 | AGONIST AND IMMUNOCONJUGATES         | AGENT                                   |
| TINOCO, Roberto                         | THEREOF                              | (73) The University of Tokyo            |
| (74) ir. M.F.J.M. Ketelaars c.s.        | (73) AbbVie Inc.                     | Japan As Represented By Director        |
| (31) 201462022191 P                     | (72) MCPHERSON, Michael J.           | General Of National Institute Of Health |
| (32) 08.07.2014                         | HOBSON, Adrian D.                    | Sciences                                |
| (33) United States of America           | HAYES, Martin E.                     | (72) KAWANA, Kei                        |
| (47) 07.04.2021                         | MARVIN, Christopher C.               | IGIMI, Shizunobu                        |
| (51) A61K 39/00                         | SCHMIDT, Diana                       | (74) ir. M.F.J.M. Ketelaars c.s.        |
| A61K 39/395                             | WAECELL, Wendy                       | (31) 2015017407                         |
| A61P 31/14                              | GOESS, Christian                     | (32) 30.01.2015                         |
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| A61P 31/20                              | HERNANDEZ JR., Axel                  | (47) 14.04.2021                         |
| A61P 35/00                              | RANDOLPH, John T.                    | (51) A61K 39/395                        |
| A61P 37/02                              | (74) dr. W.A.H.M. Van Borm           | C07K 1/22                               |
| C07K 16/22                              | (31) 201662344948 P                  | C07K 1/30                               |
| C07K 16/28                              | 201662371134 P                       | C07K 16/00                              |
| C07K 16/30                              | (32) 02.06.2016                      | C12P 21/08                              |

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| (11) EP3088412                                                                | (73) The Administrators of the Tulane Educational Fund | (21) EP13706980.3                                                                    |
| (21) EP16170137.0                                                             | (72) PASHOS, Nicholas C.                               | (22) 27.02.2013                                                                      |
| (22) 11.03.2002                                                               | BUNNELL, Bruce A.                                      | (54) HEAT EXCHANGER FOR AN OXYGENATOR AND METHOD FOR PRODUCING SUCH A HEAT EXCHANGER |
| (54) PROTEIN PURIFICATION METHOD                                              | (74) dr. A. Krebs                                      | (73) Raumedic AG                                                                     |
| (73) CHUGAI SEIYAKU KABUSHIKI KAISHA                                          | (31) 201462073719 P                                    | (72) STÖCKER, Martin                                                                 |
| (72) TAKEDA, Kozo                                                             | 201562212846 P                                         | ZEITLER, Andreas                                                                     |
| OCHI, Norimichi                                                               | (32) 31.10.2014                                        | (74) ir. M.F.J.M. Ketelaars c.s.                                                     |
| (74) ir. A. Blokland c.s.                                                     | 01.09.2015                                             | (31) 102012204705                                                                    |
| (31) 2001067111                                                               | (33) United States of America                          | (32) 23.03.2012                                                                      |
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| (33) Japan                                                                    | (47) 07.04.2021                                        | (47) 31.03.2021                                                                      |
| (47) 05.05.2021                                                               | (51) A61L 27/54                                        | (51) A61M 5/31                                                                       |
| (51) A61K 48/00                                                               | A61L 31/16                                             | A61M 5/315                                                                           |
| A61P 9/00                                                                     | (11) EP2560604                                         | (11) EP3131606                                                                       |
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| A61P 25/08                                                                    | (22) 13.04.2011                                        | (22) 14.04.2015                                                                      |
| A61P 25/14                                                                    | (54) IMPLANT WITH ANTIMICROBIAL COATING                | (54) SYRINGE PLUNGER ROD                                                             |
| A61P 25/16                                                                    | (73) Waldemar Link GmbH & Co. KG                       | (73) Swedish Orphan Biovitrum AB (publ)                                              |
| A61P 25/28                                                                    | (72) THULL, Roger                                      | (72) FRANSSON, Jonas                                                                 |
| A61P 27/02                                                                    | (74) dr. W.A.H.M. Van Borm                             | HIMBERT, Hans                                                                        |
| A61P 27/06                                                                    | (31) 10004140                                          | REINIUS, Pelle                                                                       |
| A61P 35/00                                                                    | (32) 19.04.2010                                        | (74) ir. M.F.J.M. Ketelaars c.s.                                                     |
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| C07K 14/015                                                                   | (47) 02.06.2021                                        | (32) 14.04.2014                                                                      |
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| C12N 15/86                                                                    | A61L 31/10                                             | (47) 19.05.2021                                                                      |
| (11) EP3137497                                                                | A61L 31/14                                             | (51) A61M 5/31                                                                       |
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| (22) 02.05.2015                                                               | (11) EP3381415                                         | (11) EP3556412                                                                       |
| (54) AAV VECTORS FOR RETINAL AND CNS GENE THERAPY                             | (21) EP16868690.5                                      | (21) EP19179490.8                                                                    |
| (73) Genzyme Corporation                                                      | (22) 25.11.2016                                        | (22) 29.10.2010                                                                      |
| (72) SCARIA, Abraham                                                          | (54) BIOABSORBABLE STENT                               | (54) SYRINGE STOPPER COATED WITH EXPANDED PTFE                                       |
| SULLIVAN, Jennifer                                                            | (73) JAPAN Medical Device Technology Co., Ltd.         | (73) W.L. Gore & Associates Inc.                                                     |
| STANEK, Lisa, M.                                                              | National University Corporation                        | (72) ASHMEAD, Edgar G.                                                               |
| SHIHABUDDIN, Lamya                                                            | Kumamoto University                                    | GUNZEL, Edward C.                                                                    |
| (74) ir. W.J.J.M. Kempes                                                      | (72) SASAKI, Makoto                                    | MORITZ, Michael P.                                                                   |
| (31) 201461988131 P                                                           | NIIDOME, Takuro                                        | (74) ir. W.J.J.M. Kempes                                                             |
| 201562114575 P                                                                | JIN, Zhen Yu                                           | (31) 25615609 P                                                                      |
| (32) 02.05.2014                                                               | YAMASHITA, Shuzo                                       | (32) 29.10.2009                                                                      |
| 10.02.2015                                                                    | (74) ir. H.A. Witmans c.s.                             | (33) United States of America                                                        |
| (33) United States of America                                                 | (31) 2015231163                                        | (47) 14.04.2021                                                                      |
| United States of America                                                      | (32) 26.11.2015                                        | (51) A61M 11/00                                                                      |
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| (51) A61L 26/00                                                               | (47) 23.06.2021                                        | B05B 11/00                                                                           |
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| (73) BIOM'UP FRANCE SAS                                                       | (54) HEART HELP PUMP                                   | (73) Boehringer Ingelheim International GmbH                                         |
| (72) SPOTNITZ, William                                                        | (73) MedicalTree Patent Ltd.                           | (72) EICHER, Joachim                                                                 |
| CENTIS, Valérie                                                               | (72) FORSELL, Peter                                    | MUELLER, Markus                                                                      |
| MOURA CAMPOS, Doris                                                           | (74) ir. M.F.J.M. Ketelaars c.s.                       | WINKLER, Robert Gerhard                                                              |
| DE GASPERIS, Alexia                                                           | (31) 0802161                                           | (74) ir. F.A. Geurts c.s.                                                            |
| (74) ir. F.A. Geurts c.s.                                                     | 202381 P                                               | (31) 14001603                                                                        |
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| (51) A61L 27/36                                                               | (47) 07.04.2021                                        | European Patent Office (EPO)                                                         |
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| (54) SURGICAL GRAFTS FOR REPLACING THE NIPPLE AND AREOLA OR DAMAGED EPIDERMIS | F28F 21/06                                             |                                                                                      |
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|                                         |                                                                                                                         |                                                                                               |
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| F04B 43/04                              | (32) 22.12.2009                                                                                                         | (11) EP3532499                                                                                |
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| (21) EP18159768.3                       | (51) A61M 15/00                                                                                                         | (54) ANTI-IL-33 ANTIBODIES AND USES THEREOF                                                   |
| (22) 02.03.2018                         | (11) EP2731572                                                                                                          | (73) Eli Lilly and Company                                                                    |
| (54) EVAPORATOR UNIT FOR AN INHALER     | (21) EP12740193.3                                                                                                       | (72) BENSCHOP, Robert Jan                                                                     |
| (73) Hauni Maschinenbau GmbH            | (22) 13.07.2012                                                                                                         | DAVIES, Julian                                                                                |
| (72) SCHMIDT, Rene                      | (54) IMPROVEMENTS RELATING TO DELIVERY DEVICES                                                                          | OKRAGLY, Angela Jeannine                                                                      |
| KESSLER, Marc                           | (73) Pharmaxis Ltd.                                                                                                     | PATEL, Chetankumar Natvarlal                                                                  |
| (74) ir. F.A. Geurts c.s.               | (72) SEENEY, Philip                                                                                                     | TRUHLAR, Stephanie Marie                                                                      |
| (31) 102017104555                       | JENNINGS, Douglas Ivan                                                                                                  | (74) ir. M.F.J.M. Ketelaars c.s.                                                              |
| (32) 06.03.2017                         | (74) dr. A. Krebs                                                                                                       | (31) 201662414258 P                                                                           |
| (33) Germany                            | (31) 201112030                                                                                                          | (32) 28.10.2016                                                                               |
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| (51) A61M 11/04                         | (32) 13.07.2011                                                                                                         | (47) 05.05.2021                                                                               |
| A61M 15/06                              | 22.07.2011                                                                                                              | (51) A61P 1/00                                                                                |
| H05B 1/02                               | (33) United Kingdom                                                                                                     | A61P 37/06                                                                                    |
| A24F 40/00                              | United Kingdom                                                                                                          | C07K 16/24                                                                                    |
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| (54) VAPORIZATION DEVICE SYSTEMS        | A61N 1/36                                                                                                               | (54) BIOMARKER                                                                                |
| (73) Juul Labs International Inc.       | (11) EP3180070                                                                                                          | (73) Oxford University Innovation Limited                                                     |
| (72) Monsees, James                     | (21) EP15831529.1                                                                                                       | (72) WEST, Nathaniel Richard                                                                  |
| Bowen, Adam                             | (22) 14.08.2015                                                                                                         | OWENS, Benjamin Michael Joseph                                                                |
| Hatton, Cole                            | (54) IMPLANTABLE LEAD AFFIXATION STRUCTURE FOR NERVE STIMULATION TO ALLEVIATE BLADDER DYSFUNCTION AND OTHER INDICATIONS | HEGAZY, Ahmed Nabil                                                                           |
| Christensen, Steven                     | (73) Axonics Modulation Technologies, Inc.                                                                              | POWRIE, Fiona Margaret                                                                        |
| Atkins, Ariel                           | (72) LEE, Henry                                                                                                         | (74) ir. M.F.J.M. Ketelaars c.s.                                                              |
| Lomeli, Kevin                           | HWU, Alexander                                                                                                          | (31) 201501480                                                                                |
| Hibmacronan, Christopher Nicholas       | (74) ir. F.A. Geurts c.s.                                                                                               | 201501511                                                                                     |
| Morenstein, Joshua                      | (31) 201462038122 P                                                                                                     | 201521446                                                                                     |
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| 10.02.2014                              | (51) A61N 1/04                                                                                                          | (51) A61P 9/10                                                                                |
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| (51) A61M 13/00                         | (54) MEDICAL THERAPY ARRANGEMENT                                                                                        | (22) 30.09.2009                                                                               |
| A61M 16/00                              | (73) Exoneural Network AB                                                                                               | (54) COMPOSITIONS COMPRISING DECELLULARIZED EXTRACELLULAR MATRIX OBTAINED FROM CARDIAC TISSUE |
| A61M 16/01                              | (72) WISTRAND, Jonas                                                                                                    | (73) The Regents of the University of California                                              |
| A61M 16/06                              | LUNDQVIST, Fredrik                                                                                                      | (72) CHRISTMAN,, Karen                                                                        |
| A61M 16/08                              | SJÖBERG, Emma                                                                                                           | SINGELYN, Jennifer                                                                            |
| A61M 16/10                              | GAWELL, Johan                                                                                                           | DEQUACH, Jessica                                                                              |
| A61M 16/16                              | HALLDÉN, Andreas                                                                                                        | (74) J.M.H. Duyver lic.                                                                       |
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| A62B 7/00                               | (31) 1250685                                                                                                            | (32) 30.09.2008                                                                               |
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| B32B 3/28                               | (32) 26.06.2012                                                                                                         | (47) 07.04.2021                                                                               |
| B32B 3/30                               | 26.06.2012                                                                                                              | (51) A61P 25/00                                                                               |
| B32B 5/18                               | (33) Sweden                                                                                                             | C12N 5/00                                                                                     |
| B32B 5/22                               | United States of America                                                                                                | C12N 5/071                                                                                    |
| B32B 27/00                              | (47) 07.04.2021                                                                                                         | C12N 5/0797                                                                                   |
| (11) EP2515980                          | (51) A61P 1/00                                                                                                          | A61K 35/30                                                                                    |
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| (54) COMPONENTS FOR MEDICAL CIRCUITS    | A61P 17/00                                                                                                              |                                                                                               |
| (73) Fisher & Paykel Healthcare Limited |                                                                                                                         |                                                                                               |
| (72) HERMEZ, Laith, Adeeb               |                                                                                                                         |                                                                                               |
| ORCHARD, Kieran, Michael                |                                                                                                                         |                                                                                               |
| GIERKE, Timothy, Dee                    |                                                                                                                         |                                                                                               |

|                                        |                                   |                                    |
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| (22) 15.11.2013                        | (54) COMBINATION THERAPIES        | (21) EP18742897.4                  |
| (54) METHOD OF EXTRACTING NEURAL       | COMPRISED ANTIBODY MOLECULES      | (22) 07.06.2018                    |
| STEM CELLS USING NANOPARTICLES         | TO LAG-3                          | (54) HYDRAULIC UNIT FOR HYDRAULIC  |
| (73) Hong Kong Baptist University      | (73) Novartis AG                  | RESCUE TOOLS, AND EQUIPPED         |
| (72) YUNG, Kin-Lam                     | Immutep S.A.S.                    | RESCUE TOOL                        |
| LI, Hung-Wing                          | (72) DRANOFF, Glenn               | (73) Weber-Hydraulik GmbH          |
| LUI, Nga-Ping                          | TRIEBEL, Frédéric                 | (72) SCHMOLLNIGRUBER, Johann       |
| TSUI, Yat-Ping                         | BRIGNONE, Chrystle                | STEINPARZER, Dominik               |
| HO, See-Lok                            | BLATTNER, Walter, A.              | (74) J.M.H. Duyver lic.            |
| CHAN, Ying-Shing                       | MATARAZA, Jennifer, Marie         | (31) 504892017                     |
| SHUM, Kwok-Yan                         | SABATOS-PEYTON, Catherine, Anne   | (32) 12.06.2017                    |
| TSANG, Edman Shik-Chi                  | CHANG, Hwai, Wen                  | (33) Austria                       |
| (74) ir. J.C. Volmer c.s.              | GERHARD, Johann                   | (47) 07.04.2021                    |
| (31) 201261726762 P                    | (74) dr. A. Krebs                 | (51) A62B 13/00                    |
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| (47) 07.04.2021                        | C12N 5/0784                       | (22) 03.11.2014                    |
| (51) A61P 35/00                        | A61K 35/15                        | (54) BLAST DAMPER, BLAST DAMPER    |
| A61P 35/02                             | (11) EP3164142                    | ASSEMBLY AND METHOD FOR            |
| C12N 5/00                              | (21) EP15733758.5                 | ARRANGING A BLAST DAMPER TO A      |
| C12N 5/0783                            | (22) 03.07.2015                   | BUILDING                           |
| (11) EP3114215                         | (54) GLOBALLY ACTIVATED MONOCYTES | (73) Temet OY                      |
| (21) EP15709149.7                      | FOR USE IN TREATING CANCER        | (72) KARKKULAINEN, Timo            |
| (22) 09.03.2015                        | (73) Transimmune AG               | (74) ir. A.R. Aalbers              |
| (54) POOLED NK CELLS FROM OMBILICAL    | Yale University                   | (31) 20136083                      |
| CORD BLOOD AND THEIR USES FOR          | (72) BAUER, Günter                | (32) 05.11.2013                    |
| THE TREATMENT OF CANCER AND            | DUCKWORTH, Justin                 | (33) Finland                       |
| CHRONIC INFECTIOUS DISEASE             | TIGELAAR, Robert                  | (47) 07.04.2021                    |
| (73) Emercell SAS                      | EDELSON, Richard                  | (51) A63B 21/00                    |
| Institut National de la Santé et de la | GIRARDI, Michael                  | (11) EP3668614                     |
| Recherche Médicale                     | HENCO, Karsten                    | (21) EP18876850.1                  |
| Centre Hospitalier Universitaire de    | HAYDAY, Adrian                    | (22) 13.11.2018                    |
| Montpellier                            | (74) J.M.H. Duyver lic.           | (54) CORNER MEMBER FOR A           |
| UNIVERSITE DE MONTPELLIER              | (31) 201462020547 P               | SUPPORTIVE FRAME ASSEMBLY          |
| (72) HENNO, Patrick                    | 201413665                         | (73) Balanced Body, Inc.           |
| VILLALBA GONZALEZ, Martin              | (32) 03.07.2014                   | (72) ENDELMAN, Ken                 |
| LU, Zhao Yang                          | 01.08.2014                        | SPELMAN, Kit W.                    |
| ROSSI, Jean-François                   | (33) United States of America     | (74) J.M.H. Duyver lic.            |
| (74) dr. W.A.H.M. Van Borm             | United Kingdom                    | (31) 201762585099 P                |
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| (32) 07.03.2014                        | (51) A61Q 11/02                   | (33) United States of America      |
| (33) European Patent Office (EPO)      | C01B 33/18                        | (47) 02.06.2021                    |
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| (51) A61P 35/00                        | (11) EP3555000                    | A63B 21/02                         |
| C07D 498/16                            | (21) EP17818445.3                 | A63B 21/062                        |
| C07D 498/18                            | (22) 01.12.2017                   | A63B 22/00                         |
| (11) EP3486248                         | (54) STANNOUS COMPATIBLE SILICA   | A63B 23/035                        |
| (21) EP18213678.8                      | (73) Evonik Operations GmbH       | A63B 71/02                         |
| (22) 26.09.2013                        | (72) GALLIS, Karl W.              | A63B 71/04                         |
| (54) IMPROVED METHODS FOR THE          | HAGAR, William J.                 | (11) EP3375497                     |
| ACYLATION OF MAYTANSINOL               | NASSIVERA, Terry W.               | (21) EP18162132.7                  |
| (73) ImmunoGen, Inc.                   | DOLAN, Lawrence Edward            | (22) 15.03.2018                    |
| (72) Widdison, Wayne C                 | MIDHA, Sanjeev                    | (54) MODULAR SPACE-SAVING EXERCISE |
| Zhao, Robert Yongxin                   | SCHNEIDERMAN, Eva                 | EQUIPMENT                          |
| (74) ir. H.A. Witmans c.s.             | (74) ir. W.J.J.M. Kempes          | (73) Fowler, David Alexander       |
| (31) 201261705731 P                    | (31) 201662435921 P               | (72) Fowler, David Alexander       |
| (32) 26.09.2012                        | 201762509276 P                    | (74) dr. A. Krebs                  |
| (33) United States of America          | (32) 19.12.2016                   | (31) 201704112                     |
| (47) 07.04.2021                        | 22.05.2017                        | (32) 15.03.2017                    |
| (51) A61P 35/00                        | (33) United States of America     | (33) United Kingdom                |
| C07K 16/28                             | United States of America          | (47) 28.04.2021                    |
| (11) EP3317301                         | (47) 14.04.2021                   | (51) A63B 21/00                    |
| (21) EP16757391.4                      | (51) A62B 3/00                    | A63B 21/062                        |
| (22) 28.07.2016                        | B25B 28/00                        | A63B 21/078                        |
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| A63B 23/02                                | (32) 01.07.2016                         | B01D 53/81                                    |
| A63B 23/12                                | (33) Russian Federation                 | C10G 29/04                                    |
| A63B 69/00                                | (47) 02.06.2021                         | (11) EP3374055                                |
| A63B 71/00                                | (51) A63G 9/00                          | (21) EP16864774.1                             |
| (11) EP3398663                            | F16G 11/04                              | (22) 28.10.2016                               |
| (21) EP18177083.5                         | F16G 11/06                              | (54) COPPER ADSORBENT FOR GAS                 |
| (22) 06.08.2013                           | (11) EP3398661                          | PURIFICATION                                  |
| (54) EXERCISE MACHINE WITH                | (21) EP18170017.0                       | (73) UOP LLC                                  |
| MOVEABLE USER SUPPORT                     | (22) 30.04.2018                         | (72) KANAZIREV, Vladislav, I.                 |
| (73) Hoist Fitness Systems, Inc.          | (54) NET ASSEMBLY                       | GORAWARA, Jayant, K.                          |
| (72) HOCKRIDGE, Bruce                     | (73) Kompan A/S                         | (74) ir. W.J.J.M. Kempes                      |
| MEREDITH, Jeffrey O.                      | (72) BENTSEN, Nikolaj Maj               | (31) 201562253417 P                           |
| DOAN, Thao V.                             | (74) J.M.H. Duyver lic.                 | (32) 10.11.2015                               |
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| (32) 08.08.2012                           | (47) 09.06.2021                         | B01J 20/34                                    |
| 19.07.2013                                | (51) B01D 3/00                          | F25J 3/04                                     |
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| United States of America                  | (11) EP2800615                          | (21) EP13306555.7                             |
| (47) 14.04.2021                           | (21) EP12815739.3                       | (22) 14.11.2013                               |
| (51) A63B 65/00                           | (22) 13.12.2012                         | (54) Process and apparatus for the separation |
| A63B 65/10                                | (54) LOW-TEMPERATURE DISTILLATION       | of air by cryogenic distillation              |
| A63B 67/06                                | SEPARATING APPARATUS AND                | (73) L'AIR LIQUIDE, SOCIETE ANONYME           |
| A63B 59/30                                | SEPARATING METHOD USING SUCH            | POUR L'ETUDE ET L'EXPLOITATION                |
| A63B 60/34                                | AN APPARATUS                            | DES PROCEDES GEORGES CLAUDE                   |
| (11) EP2890465                            | (73) L'Air Liquide Société Anonyme pour | (72) Rega, Mariano                            |
| (21) EP13759878.5                         | l'Etude et l'Exploitation des Procédés  | (74) ir. W.J.J.M. Kempes                      |
| (22) 30.08.2013                           | Georges Claude                          | (47) 14.04.2021                               |
| (54) SPORTS AND GAME PRODUCT              | (72) DOREE, Romain                      | (51) B01D 53/14                               |
| (73) YOU.FO Intellectual Property Holding | GERARDIN, Samuel                        | (11) EP3579946                                |
| B.V.                                      | TALBOT, Jean-Jacques                    | (21) EP18703025.9                             |
| (72) van LEEUWEN, Sander Adrianus         | (74) ir. W.J.J.M. Kempes                | (22) 09.02.2018                               |
| JAGER, Gosse Anne                         | (31) 1250038                            | (54) PROCESS FOR REMOVAL OF ACID              |
| BLONK, Stefanus Petrus Cornelis Maria     | (32) 03.01.2012                         | GASES FROM A FLUID STREAM AND                 |
| RUYSSENAARS, Bas Boris                    | (33) France                             | CORRESPONDING USES                            |
| (74) ir. J.C. Volmer c.s.                 | (47) 14.04.2021                         | (73) BASF SE                                  |
| (31) 2009389                              | (51) B01D 21/01                         | ExxonMobil Research and Engineering           |
| (32) 30.08.2012                           | B01D 21/24                              | Company                                       |
| (33) Netherlands                          | C23C 2/30                               | (72) INGRAM, Thomas                           |
| (47) 31.03.2021                           | (11) EP3530773                          | ERNST, Martin                                 |
| (51) A63B 69/00                           | (21) EP18158328.7                       | VORBERG, Gerald                               |
| A63B 69/12                                | (22) 23.02.2018                         | PANCHENKO, Alexander                          |
| A63G 31/00                                | (54) INSTALLATION FOR THE TREATMENT     | EBERT, Sophia                                 |
| E04H 4/00                                 | OF FLUX FOR STEEL PRETREATMENT          | HOLCOMBE, Thomas Wesley                       |
| (11) EP3487593                            | AND METHOD FOR OPERATING THE            | SISKIN, Michael                               |
| (21) EP17800746.4                         | INSTALLATION                            | PEREIRA, Carla                                |
| (22) 03.11.2017                           | (73) RAM Engineering + Anlagenbau GmbH  | SIEDER, Georg                                 |
| (54) WAVE INSTALLATION FOR                | (72) Schmelz, Dr. Frank                 | (74) ir. W.J.J.M. Kempes                      |
| GENERATING AN ARTIFICIAL WAVE             | (74) J.M.H. Duyver lic.                 | (31) 17155535                                 |
| (73) L&T Lengermann & Trieschmann GmbH    | (47) 07.04.2021                         | (32) 10.02.2017                               |
| & Co. KG                                  | (51) B01D 46/00                         | (33) European Patent Office (EPO)             |
| (72) BRINKMANN, Lutz                      | (11) EP3528921                          | (47) 07.04.2021                               |
| (74) ir. J.C. Volmer c.s.                 | (21) EP17791303.5                       | (51) B01D 53/22                               |
| (31) 102016121063                         | (22) 11.10.2017                         | C07C 7/08                                     |
| (32) 04.11.2016                           | (54) PARTICULATE FILTER AND PROCESS     | C07C 7/144                                    |
| (33) Germany                              | OF OPERATING SAME                       | C07C 11/08                                    |
| (47) 14.04.2021                           | (73) Hug Engineering AG                 | C07C 41/06                                    |
| (51) A63B 69/36                           | (72) KILCHSPERGER, Roland               | C07C 43/04                                    |
| A63C 19/00                                | CAVEGN, Lukas                           | C10G 70/04                                    |
| (11) EP3478374                            | (74) ir. A. Blokland c.s.               | (11) EP3490967                                |
| (21) EP17772123.0                         | (31) 102016220417                       | (21) EP17749283.2                             |
| (22) 20.06.2017                           | (32) 18.10.2016                         | (22) 26.07.2017                               |
| (54) GOLF COURSE "KALEIDOSCOPE"           | (33) Germany                            | (54) PARAFFIN REMOVAL FROM C4                 |
| (73) Borisov, Sergei Vladimirovich        | (47) 31.03.2021                         | CONTAINING STREAMS                            |
| (72) Borisov, Sergei Vladimirovich        | (51) B01D 53/02                         | (73) Lyondell Chemical Technology, L.P.       |
| (74) J.M.H. Duyver lic.                   | B01D 53/48                              | (72) KEYVANI, Majid                           |
| (31) 2016126449                           |                                         | SAWYER, Gary, A.                              |

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|--------------------------------|----------------------------------------|-------------------------------------------|
| BEHKISH, Arsam                 | B01F 7/04                              | (47) 07.04.2021                           |
| (74) ir. F.A. Geurts c.s.      | (11) EP3573744                         | (51) B01J 19/00                           |
| (31) 201662367914 P            | (21) EP18706321.9                      | B01J 19/24                                |
| (32) 28.07.2016                | (22) 08.01.2018                        | (11) EP3246089                            |
| (33) United States of America  | (54) MIXER                             | (21) EP17158672.0                         |
| (47) 05.05.2021                | (73) NMBU                              | (22) 01.03.2017                           |
| (51) B01D 53/46                | (72) NIKQI, Ismet                      | (54) PRESSURE CONTROL TO REDUCE           |
| B01D 53/64                     | MILADINOVIC, Dejan                     | PUMP POWER FLUCTUATIONS                   |
| B01J 8/00                      | SALAS BRINGAS, Carlos Mauricio         | (73) Chevron Phillips Chemical Company LP |
| B01J 20/04                     | (74) ir. M.F.J.M. Ketelaars c.s.       | (72) HOTTOVY, John D.                     |
| C02F 1/28                      | (31) 20170127                          | KUFELD, Scott E.                          |
| (11) EP3334522                 | (32) 27.01.2017                        | (74) ir. F.A. Geurts c.s.                 |
| (21) EP16837544.2              | (33) Norway                            | (31) 201615142279                         |
| (22) 11.08.2016                | (47) 07.04.2021                        | (32) 29.04.2016                           |
| (54) ADSORBENTS                | (51) B01F 5/04                         | (33) United States of America             |
| (73) BASF Corporation          | C07C 263/10                            | (47) 28.04.2021                           |
| (72) VITYUK, Artem             | C08G 18/76                             | (51) B01J 19/08                           |
| MAGLIO, Alfonse                | (11) EP3592452                         | C01B 15/01                                |
| DEUTSCH, Keenan                | (21) EP18710681.0                      | C01B 15/024                               |
| HRATKO, Linda                  | (22) 28.02.2018                        | C10G 17/02                                |
| (74) dr. W.A.H.M. Van Borm     | (54) PROCESS FOR PREPARING             | C10G 27/10                                |
| (31) 201562205155 P            | ISOCYANATES                            | C10G 27/12                                |
| (32) 14.08.2015                | (73) Dow Global Technologies LLC       | C10G 32/02                                |
| (33) United States of America  | (72) KLINGER, Artur                    | C25B 1/30                                 |
| (47) 07.04.2021                | GILLIS, Paul A.                        | H01M 2/14                                 |
| (51) B01D 53/94                | KHAN, Irfan                            | (11) EP3404079                            |
| B01J 21/00                     | (74) ir. J.D. de Zeeuw                 | (21) EP18178157.6                         |
| B01J 23/10                     | (31) 201762467317 P                    | (22) 27.07.2012                           |
| C01G 25/00                     | (32) 06.03.2017                        | (54) PROCESS FOR IN-SITU                  |
| (11) EP3009403                 | (33) United States of America          | ELECTROCHEMICAL OXIDATIVE                 |
| (21) EP15191869.5              | (47) 14.04.2021                        | GENERATION AND CONVERSION OF              |
| (22) 26.06.2003                | (51) B01J 8/00                         | ORGANOSULFUR COMPOUNDS                    |
| (54) COMPOSITION BASED ON      | C07C 59/295                            | (73) Saudi Arabian Oil Company            |
| ZIRCONIUM OXIDE AND OXIDES     | C07D 307/68                            | (72) AL-SHAFAEI, Emad, Naji               |
| OF CERIUM, LANTHANUM AND OF    | C08G 63/16                             | (74) dr. ir. G.J.C. Verdijk c.s.          |
| ANOTHER RARE EARTH, A METHOD   | (11) EP3283471                         | (31) 201161513208 P                       |
| FOR PREPARING SAME AND USE     | (21) EP16779667.1                      | (32) 29.07.2011                           |
| THEREOF AS CATALYST            | (22) 18.04.2016                        | (33) United States of America             |
| (73) Rhodia Operations         | (54) METHOD OF PRODUCING               | (47) 31.03.2021                           |
| (72) Hedouin, Catherine        | FURAN CARBOXYLATES FROM                | (51) B01J 19/10                           |
| (74) ir. W.J.J.M. Kempes       | ALDARIC ACIDS BY USING SOLID           | D01F 1/10                                 |
| (31) 0207926                   | HETEROGENEOUS CATALYSTS                | D01F 2/00                                 |
| (32) 26.06.2002                | (73) Teknologian Tutkimuskeskus VTT Oy | D21H 11/18                                |
| (33) France                    | (72) ASIKAINEN, Martta                 | D21H 17/69                                |
| (47) 21.04.2021                | THOMAS, David                          | D21H 19/34                                |
| (51) B01F 3/00                 | HARLIN, Ali                            | D21H 19/38                                |
| B01F 3/08                      | (74) J.M.H. Duyver lic.                | D21H 19/40                                |
| B01F 5/04                      | (31) 20155285                          | D21H 19/52                                |
| B01F 15/02                     | (32) 17.04.2015                        | (11) EP3612675                            |
| C10G 31/08                     | (33) Finland                           | (21) EP18732867.9                         |
| (11) EP3566766                 | (47) 09.06.2021                        | (22) 20.04.2018                           |
| (21) EP19176620.3              | (51) B01J 8/18                         | (54) MICROFIBRILLATED CELLULOSE           |
| (22) 24.03.2016                | B01J 8/44                              | WITH ENHANCED PROPERTIES AND              |
| (54) SEQUENTIAL MIXER FOR A    | C10G 11/18                             | METHODS OF MAKING THE SAME                |
| HYDROCARBON CONVERSION         | (11) EP3638412                         | (73) FiberLean Technologies Limited       |
| PROCESS                        | (21) EP18731774.8                      | (72) WINDEBANK, Mark                      |
| (73) Saudi Arabian Oil Company | (22) 11.06.2018                        | SKUSE, David                              |
| (72) CHOI, Ki-hyouk            | (54) GAS INJECTION ELEMENT FOR A       | MOTSI, Tafadzwa                           |
| GARHOUSH, Mohammad S.          | FLUID CATALYTIC CRACKING UNIT          | TELLIER, Guillaume                        |
| AL-OTAIBI, Bader M             | AND GAS DISTRIBUTION SYSTEM            | (74) dr. W.A.H.M. Van Borm                |
| ALABDULLAH, Mohammad A.        | EQUIPPED WITH THIS INJECTION           | (31) 201762488299 P                       |
| (74) ir. H.A. Witmans c.s.     | ELEMENT                                | (32) 21.04.2017                           |
| (31) 201514666362              | (73) Total Raffinage Chimie            | (33) United States of America             |
| (32) 24.03.2015                | (72) SIMON, Hubert                     | (47) 02.06.2021                           |
| (33) United States of America  | (74) ir. W.J.J.M. Kempes               | (51) B01J 19/12                           |
| (47) 21.04.2021                | (31) 1755223                           | C12M 1/00                                 |
| (51) B01F 3/12                 | (32) 12.06.2017                        | F21S 4/28                                 |
| B01F 7/02                      | (33) France                            | (11) EP3647403                            |

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|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| (21) EP18204112.9                                                                                                | (74) ir. W.J.J.M. Kempes                                                                                                     | (72) SATO, Kazuhito                                                                                                                              |
| (22) 02.11.2018                                                                                                  | (31) 18198790                                                                                                                | NAKASHIZU, Shigenori                                                                                                                             |
| (54) LED ARRANGEMENT FOR USE IN A BIOREACTOR                                                                     | (32) 05.10.2018                                                                                                              | (74) ir. A. Blokland c.s.                                                                                                                        |
| (73) O&N B.V.                                                                                                    | (33) European Patent Office (EPO)                                                                                            | (31) 2009287596                                                                                                                                  |
| (72) VAN VELZEN, Dick                                                                                            | (47) 14.04.2021                                                                                                              | 2009287597                                                                                                                                       |
| HULSHOFF, Hendrik Jan                                                                                            | (51) B01J 21/08                                                                                                              | (32) 18.12.2009                                                                                                                                  |
| MULDER, Gerardus Rudi Maria                                                                                      | B01J 23/20                                                                                                                   | 18.12.2009                                                                                                                                       |
| OOSTERBAAN, Wiebe IJsbrand Leo                                                                                   | B01J 35/10                                                                                                                   | (33) Japan                                                                                                                                       |
| STEL, Jarno                                                                                                      | B01J 37/02                                                                                                                   | Japan                                                                                                                                            |
| OELEN, Jan Johannes                                                                                              | B01J 37/06                                                                                                                   | (47) 28.04.2021                                                                                                                                  |
| KOEK, Charles Adrianus Gerardus                                                                                  | C07C 1/20                                                                                                                    | (51) B01J 23/85                                                                                                                                  |
| MAESSEN, Theodorus Antonius                                                                                      | C07C 11/167                                                                                                                  | B01J 23/882                                                                                                                                      |
| VAN DRUNEN, Rudi                                                                                                 | (11) EP3322524                                                                                                               | B01J 23/94                                                                                                                                       |
| (74) ir. F.A. Geurts c.s.                                                                                        | (21) EP16739054.1                                                                                                            | B01J 27/051                                                                                                                                      |
| (47) 07.04.2021                                                                                                  | (22) 05.07.2016                                                                                                              | B01J 27/128                                                                                                                                      |
| (51) B01J 19/24                                                                                                  | (54) PREPARATION PROCESS OF A SILICA SUPPORTED CATALYST COMPRISING TANTALUM FOR THE TRANSFORMATION OF ETHANOL INTO BUTADIENE | B01J 27/19                                                                                                                                       |
| B01J 21/08                                                                                                       | (73) IFP Energies nouvelles                                                                                                  | B01J 27/28                                                                                                                                       |
| B01J 23/46                                                                                                       | Compagnie Générale des Etablissements Michelin                                                                               | B01J 31/02                                                                                                                                       |
| B01J 31/02                                                                                                       | (72) CADRAN, Nicolas                                                                                                         | B01J 31/04                                                                                                                                       |
| B01J 31/16                                                                                                       | CHAUMONNOT, Alexandra                                                                                                        | B01J 35/10                                                                                                                                       |
| B01J 31/18                                                                                                       | (74) ir. W.J.J.M. Kempes                                                                                                     | B01J 37/02                                                                                                                                       |
| B01J 35/04                                                                                                       | (31) 1556662                                                                                                                 | B01J 37/08                                                                                                                                       |
| B01J 37/02                                                                                                       | (32) 13.07.2015                                                                                                              | B01J 37/20                                                                                                                                       |
| C07C 45/50                                                                                                       | (33) France                                                                                                                  | B01J 38/52                                                                                                                                       |
| (11) EP3632887                                                                                                   | (47) 14.04.2021                                                                                                              | B01J 38/62                                                                                                                                       |
| (21) EP19200448.9                                                                                                | (51) B01J 21/12                                                                                                              | C10G 11/05                                                                                                                                       |
| (22) 30.09.2019                                                                                                  | B01J 27/10                                                                                                                   | C10G 45/08                                                                                                                                       |
| (54) PROCESS FOR STARTING A HYDROFORMYLATION REACTOR                                                             | B01J 27/12                                                                                                                   | C10G 45/12                                                                                                                                       |
| (73) Evonik Operations GmbH                                                                                      | C07C 2/66                                                                                                                    | (11) EP3490707                                                                                                                                   |
| (72) Haßelberg, Jennifer                                                                                         | C07C 2/68                                                                                                                    | (21) EP17731170.1                                                                                                                                |
| Franke, Robert                                                                                                   | C07C 15/02                                                                                                                   | (22) 22.06.2017                                                                                                                                  |
| Stenger, Frank                                                                                                   | C07C 15/107                                                                                                                  | (54) CATALYST BASED ON AN ORGANIC COMPOUND AND THE USE THEREOF IN A PROCESS OF HYDROTREATING AND/OR HYDROCRACKING                                |
| Kreis, Peter                                                                                                     | (11) EP3416934                                                                                                               | (73) IFP Energies nouvelles                                                                                                                      |
| Hecht, Corinna                                                                                                   | (21) EP17703856.9                                                                                                            | (72) CARRETTE, Pierre-Louis                                                                                                                      |
| Kristen, Marc Oliver                                                                                             | (22) 19.01.2017                                                                                                              | (74) ir. W.J.J.M. Kempes                                                                                                                         |
| Ott, Florian                                                                                                     | (54) AROMATIC ALKYLATION USING CHEMICALLY-TREATED SOLID OXIDES                                                               | (31) 1657308                                                                                                                                     |
| (74) ir. W.J.J.M. Kempes                                                                                         | (73) Chevron Phillips Chemical Company LP                                                                                    | (32) 28.07.2016                                                                                                                                  |
| (31) 18198794                                                                                                    | (72) YANG, Qing                                                                                                              | (33) France                                                                                                                                      |
| (32) 05.10.2018                                                                                                  | MCDANIEL, Max                                                                                                                | (47) 14.04.2021                                                                                                                                  |
| (33) European Patent Office (EPO)                                                                                | KILGORE, Uriah                                                                                                               | (51) B01J 23/85                                                                                                                                  |
| (47) 14.04.2021                                                                                                  | HLAVINKA, Mark                                                                                                               | B01J 23/882                                                                                                                                      |
| (51) B01J 19/24                                                                                                  | (74) ir. C.G.C. Veldman-Dijkers                                                                                              | B01J 23/94                                                                                                                                       |
| B01J 21/08                                                                                                       | (31) 201615045476                                                                                                            | B01J 27/051                                                                                                                                      |
| B01J 23/46                                                                                                       | (32) 17.02.2016                                                                                                              | B01J 27/128                                                                                                                                      |
| B01J 31/02                                                                                                       | (33) United States of America                                                                                                | B01J 27/19                                                                                                                                       |
| B01J 31/16                                                                                                       | (47) 26.05.2021                                                                                                              | B01J 27/28                                                                                                                                       |
| B01J 31/18                                                                                                       | (51) B01J 23/656                                                                                                             | B01J 31/04                                                                                                                                       |
| B01J 35/04                                                                                                       | B01J 23/889                                                                                                                  | B01J 35/10                                                                                                                                       |
| B01J 37/02                                                                                                       | B01J 27/232                                                                                                                  | B01J 37/02                                                                                                                                       |
| C07C 45/50                                                                                                       | B01J 29/076                                                                                                                  | B01J 37/08                                                                                                                                       |
| (11) EP3632888                                                                                                   | B01J 29/48                                                                                                                   | B01J 37/20                                                                                                                                       |
| (21) EP19200451.3                                                                                                | C10G 2/00                                                                                                                    | B01J 38/52                                                                                                                                       |
| (22) 30.09.2019                                                                                                  | C10G 45/64                                                                                                                   | B01J 38/62                                                                                                                                       |
| (54) PROCESS FOR THE IN-SITU PRODUCTION OF A HYDROFORMYLATION CATALYST SYSTEM WHICH IS HETEROGENIZED ON A VESSEL | (11) EP2514525                                                                                                               | C10G 11/05                                                                                                                                       |
| (73) Evonik Operations GmbH                                                                                      | (21) EP10837473.7                                                                                                            | C10G 45/08                                                                                                                                       |
| (72) Haßelberg, Jennifer                                                                                         | (22) 07.12.2010                                                                                                              | C10G 45/12                                                                                                                                       |
| Franke, Robert                                                                                                   | (54) CATALYST COMPOSITION FOR PRODUCTION OF HYDROCARBONS AND METHOD FOR PRODUCING HYDROCARBONS                               | (11) EP3490708                                                                                                                                   |
| Stenger, Frank                                                                                                   | (73) Cosmo Oil Co., Ltd.                                                                                                     | (21) EP17730827.7                                                                                                                                |
| Kreis, Peter                                                                                                     |                                                                                                                              | (22) 22.06.2017                                                                                                                                  |
| Hecht, Corinna                                                                                                   |                                                                                                                              | (54) CATALYST BASED ON ACETILBUTYROLACTONE AND/OR ITS HYDROLYSIS PRODUCTS AND THE USE THEREOF IN A PROCESS OF HYDROTREATING AND/OR HYDROCRACKING |
| Kristen, Marc Oliver                                                                                             |                                                                                                                              |                                                                                                                                                  |
| Ott, Florian                                                                                                     |                                                                                                                              |                                                                                                                                                  |

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|---------------------------------------|------------------------------------------------|------------------------------------|
| (73) IFP Energies nouvelles           | (73) Miltenyi Biotec B.V. & Co. KG             | (32) 14.03.2017                    |
| (72) CARRETTE, Pierre-Louis           | (72) FOSTER, John                              | (33) Finland                       |
| (74) ir. W.J.J.M. Kempes              | GRUMMITT, Daryl                                | (47) 14.04.2021                    |
| (31) 1657307                          | PETERS, Ralf-Peter                             | (51) B01L 3/00                     |
| (32) 28.07.2016                       | PETH, Christian                                | G01N 1/28                          |
| (33) France                           | MARTINEZ, Nicholas                             | G01N 15/10                         |
| (47) 14.04.2021                       | NAGEL, Markus                                  | G01N 33/543                        |
| (51) B01J 29/70                       | (74) ir. W.J.J.M. Kempes                       | C12Q 1/6806                        |
| B01J 35/00                            | (31) 201461948493 P                            | C12Q 1/6869                        |
| C01B 39/48                            | (32) 05.03.2014                                | (11) EP3384046                     |
| C07C 2/66                             | (33) United States of America                  | (21) EP16816512.4                  |
| (11) EP3099634                        | (47) 21.04.2021                                | (22) 30.11.2016                    |
| (21) EP14828398.9                     | (51) B01L 3/00                                 | (54) DIGITAL MICROFLUIDIC SYSTEM   |
| (22) 19.12.2014                       | B01L 7/00                                      | FOR SINGLE-CELL ISOLATION AND      |
| (54) SYNTHESIS OF MOLECULAR SIEVE     | B81B 7/00                                      | CHARACTERIZATION OF ANALYTES       |
| MCM-56                                | H05B 3/26                                      | (73) Illumina, Inc.                |
| (73) ExxonMobil Chemical Patents Inc. | H05B 3/34                                      | (72) JAMSHIDI, Arash               |
| (72) JOHNSON, Ivy D.                  | (11) EP3110554                                 | LIN, Yan-you                       |
| HRYCENKO, Nadya Ann                   | (21) EP16717490.3                              | ABSALAN, Farnaz                    |
| (74) ir. W.J.J.M. Kempes              | (22) 07.04.2016                                | STUART, Sarah                      |
| (31) 201461931821 P                   | (54) DIGITAL PCR DEVICE                        | CANN, Gordon                       |
| 14160679                              | (73) Cell ID Pte Ltd                           | WU, Yir-Shyuan                     |
| (32) 27.01.2014                       | (72) SIM, Lye Hock                             | KHURANA, Tarun                     |
| 19.03.2014                            | (74) ir. H.A. Witmans c.s.                     | FISHER, Jeffrey, S.                |
| (33) United States of America         | (31) PCT/SG2015/050062                         | (74) ir. J.D. de Zeeuw             |
| European Patent Office (EPO)          | (32) 07.04.2015                                | (31) 201562261786 P                |
| (47) 14.04.2021                       | (33) World Intellectual Property Office (WIPO) | 201662281510 P                     |
| (51) B01J 29/89                       | (47) 07.04.2021                                | 201662314071 P                     |
| B01J 29/90                            | (51) B01L 3/00                                 | 201662358968 P                     |
| B01J 35/02                            | B03C 5/00                                      | (32) 01.12.2015                    |
| B01J 35/10                            | B03C 5/02                                      | 21.01.2016                         |
| B01J 38/12                            | H03F 1/32                                      | 28.03.2016                         |
| B01J 38/48                            | H03F 3/217                                     | 06.07.2016                         |
| C01B 39/08                            | (11) EP3529895                                 | (33) United States of America      |
| C07D 301/12                           | (21) EP17797751.9                              | United States of America           |
| (11) EP3256252                        | (22) 18.10.2017                                | United States of America           |
| (21) EP16704206.8                     | (54) ELECTRONIC DRIVING CIRCUIT                | United States of America           |
| (22) 12.02.2016                       | FOR DRIVING ELECTRODES OF                      | (47) 28.04.2021                    |
| (54) PROCESS FOR THE REGENERATION     | A MICROFLUIDIC DEVICE FOR                      | (51) B01L 3/14                     |
| OF A TITANIUM ZEOLITE CATALYST        | MANIPULATION OF PARTICLES,                     | (11) EP2918344                     |
| FOR PROPYLENE EPOXIDATION             | AND CORRESPONDING ANALYSIS                     | (21) EP15159679.8                  |
| (73) BASF SE                          | APPARATUS                                      | (22) 14.05.2010                    |
| Dow Global Technologies LLC           | (73) Menarini Silicon Biosystems S.p.A.        | (54) DENSITY PHASE SEPARATION      |
| (72) RIEDEL, Dominic                  | (72) UCELLI, Mauro                             | DEVICE                             |
| TELES, Joaquim Henrique               | TOMMASI, Andrea                                | (73) Becton, Dickinson and Company |
| URBANCZYK, Daniel                     | MEDORO, Gianni                                 | (72) Crawford, Jamieson W.         |
| WEGERLE, Ulrike                       | (74) ir. F.A. Geurts c.s.                      | Attri, Ravi                        |
| SPIISKE, Luise                        | (31) 201600104760                              | Battles, Christopher A.            |
| PARVULESCU, Andrei-Nicolae            | (32) 18.10.2016                                | Hires, Gregory R.                  |
| SCHRÖDER, Alexander                   | (33) Italy                                     | Bartfeld, Benjamin                 |
| MÜLLER, Ulrich                        | (47) 21.04.2021                                | (74) ir. H.A. Witmans c.s.         |
| WEIDENBACH, Meinolf                   | (51) B01L 3/00                                 | (31) 178599 P                      |
| WITZL, Werner                         | C12M 1/00                                      | (32) 15.05.2009                    |
| (74) ir. W.J.J.M. Kempes              | C12M 3/04                                      | (33) United States of America      |
| (31) 15154998                         | G01N 23/00                                     | (47) 30.06.2021                    |
| 201562115658 P                        | (11) EP3595813                                 | (51) B03B 5/36                     |
| (32) 13.02.2015                       | (21) EP18712442.5                              | B03B 5/62                          |
| 13.02.2015                            | (22) 12.03.2018                                | B03B 11/00                         |
| (33) European Patent Office (EPO)     | (54) A SYSTEM AND A METHOD FOR                 | (11) EP3581276                     |
| United States of America              | IRRADIATING BIOLOGICAL MATERIAL                | (21) EP19179588.9                  |
| (47) 07.04.2021                       | (73) Biogenium Microsystems Oy                 | (22) 12.06.2019                    |
| (51) B01L 3/00                        | (72) KALLIO, Pasi                              | (54) HYDRAULIC DENSITY SEPARATOR   |
| B01L 3/02                             | RANTANEN, Krista                               | (73) LIG GmbH                      |
| (11) EP3113885                        | KREUTZER, Joose                                | (72) COULTON, Richard              |
| (21) EP15710137.9                     | TANHUANPÄÄ, Olli                               | (74) ir. W.J.J.M. Kempes           |
| (22) 05.03.2015                       | JAAKKOLA, Panu                                 | (31) 201809739                     |
| (54) CELL SORTING SYSTEM USING        | (74) ir. W.J.J.M. Kempes                       | (32) 14.06.2018                    |
| ELECTROMAGNETIC SOLENOID              | (31) 20175229                                  | (33) United Kingdom                |

|                                        |                                     |                                                |
|----------------------------------------|-------------------------------------|------------------------------------------------|
| (47) 05.05.2021                        | (54) METHODS OF CLEANING A          | C22C 38/54                                     |
| (51) B05B 1/12                         | COMPONENT WITHIN A TURBINE          | (11) EP3591079                                 |
| B05B 1/30                              | ENGINE                              | (21) EP19194164.0                              |
| B05B 17/08                             | (73) General Electric Company       | (22) 10.06.2016                                |
| B05B 12/00                             | (72) MILLHAEM, Michael Robert       | (54) STEEL FOR PRESS HARDENING                 |
| (11) EP3608027                         | TIBBETTS, Nicole                    | AND PRESS HARDENED PART                        |
| (21) EP19187621.8                      | PRITCHARD, Byron Andrew             | MANUFACTURED FROM SUCH STEEL                   |
| (22) 22.07.2019                        | BEWLAY, Bernard Patrick             | (73) ArcelorMittal                             |
| (54) FOUNTAIN ATTACHMENT FOR           | LAURIA, Keith Anthony               | (72) DRILLET, Pascal                           |
| WATER-BASED GAMES WITH AN              | KULKARNI, Ambarish Jayant           | POIRIER, Maria                                 |
| ADJUSTABLE NOZZLE                      | ROSENZWEIG, Mark                    | SARKAR, Sujay                                  |
| (73) Oase GmbH                         | MORRA, Martin Matthew               | (74) ir. M.F.J.M. Ketelaars c.s.               |
| (72) Wesselmeier, Reinhard             | SAMBOR, Timothy Mark                | (31) PCT/IB2015/001156                         |
| (74) dr. W.A.H.M. Van Borm             | JENKINS, Andrew James               | (32) 09.07.2015                                |
| (31) 102018119424                      | (74) ir. H.A. Witmans c.s.          | (33) World Intellectual Property Office (WIPO) |
| (32) 09.08.2018                        | (31) 201715498141                   | (47) 02.06.2021                                |
| (33) Germany                           | (32) 26.04.2017                     | (51) B22C 9/08                                 |
| (47) 31.03.2021                        | (33) United States of America       | (11) EP3188856                                 |
| (51) B05B 12/04                        | (47) 16.06.2021                     | (21) EP15762670.6                              |
| B05B 17/08                             | (51) B08B 9/055                     | (22) 02.09.2015                                |
| F21V 33/00                             | B60L 7/28                           | (54) FEEDER SYSTEM                             |
| (11) EP2976161                         | F16L 55/26                          | (73) FOSECO INTERNATIONAL LIMITED              |
| (21) EP14711761.8                      | G01M 3/00                           | (72) VOLKS, Christof                           |
| (22) 21.03.2014                        | (11) EP3019285                      | (74) ir. H.A. Witmans c.s.                     |
| (54) ASSEMBLY, IN PARTICULAR A PLAY    | (21) EP14744457.4                   | (31) 201415516                                 |
| FOUNTAIN                               | (22) 03.07.2014                     | (32) 02.09.2014                                |
| (73) PlayFountain B.V.                 | (54) PIG FOR CLEANING AND/OR        | (33) United Kingdom                            |
| (72) HOEKS, Wilhelmus Adolfus Johannes | INSPECTION OF PIPES                 | (47) 31.03.2021                                |
| Marie                                  | (73) Rosen Swiss AG                 | (51) B23K 7/00                                 |
| VAN KEMPEN, Frits Jan                  | (72) DANILOV, Andrey                | E21B 29/02                                     |
| MOLENAAR, Guido William                | BEUKER, Thomas                      | E21B 33/12                                     |
| VAN DEN BERG, Frank                    | (74) ir. J.C. Volmer c.s.           | E21B 33/134                                    |
| (74) ir. A.R. Aalbers                  | (31) 102013011626                   | E21B 43/116                                    |
| (31) 13160685                          | (32) 12.07.2013                     | F41A 21/26                                     |
| (32) 22.03.2013                        | (33) Germany                        | F42B 8/04                                      |
| (33) European Patent Office (EPO)      | (47) 07.04.2021                     | (11) EP3221550                                 |
| (47) 09.06.2021                        | (51) B21D 5/02                      | (21) EP15808442.6                              |
| (51) B06B 1/02                         | (11) EP2734313                      | (22) 18.11.2015                                |
| B29C 65/00                             | (21) EP12735757.2                   | (54) DOWNHOLE TOOL WITH A                      |
| B29C 65/08                             | (22) 06.07.2012                     | PROPELLANT CHARGE                              |
| B29L 31/00                             | (54) TOOLING ASSEMBLIES AND         | (73) SPEX Corporate Holdings Ltd               |
| B29L 31/30                             | SYSTEMS                             | (72) OAG, Jamie                                |
| (11) EP3566783                         | (73) Wilson Tool International Inc. | YOUNGER, Rae                                   |
| (21) EP19174217.0                      | (72) ROGERS, Bryan, L.              | JOHNSTON, Sidney Dantuma                       |
| (22) 29.12.2006                        | LEE, Brian, J.                      | (74) J.M.H. Duyver lic.                        |
| (54) SYSTEMS AND METHODS FOR           | (74) J.M.H. Duyver lic.             | (31) 201420491                                 |
| PROVIDING POWER TO ULTRASONIC          | (31) 201113189503                   | 201506265                                      |
| WELDING PROBES                         | (32) 23.07.2011                     | (32) 18.11.2014                                |
| (73) Dukane IAS, LLC                   | (33) United States of America       | 13.04.2015                                     |
| (72) JOHANSEN, David K.                | (47) 02.06.2021                     | (33) United Kingdom                            |
| LEONARD, Charles L.                    | (51) B21D 22/02                     | United Kingdom                                 |
| KLINSTEIN, Leo                         | B32B 15/01                          | (47) 14.04.2021                                |
| JURKOWSKI, William E.                  | C21D 1/673                          | (51) B23K 9/04                                 |
| RE, Joseph                             | C21D 6/00                           | B23K 9/12                                      |
| (74) ir. W.J.J.M. Kempes               | C21D 8/02                           | B23K 9/133                                     |
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| (32) 29.12.2005                        | C22C 21/02                          | B23K 15/00                                     |
| (33) United States of America          | C22C 38/02                          | B23K 26/342                                    |
| (47) 28.04.2021                        | C22C 38/06                          | B22F 3/00                                      |
| (51) B08B 9/00                         | C22C 38/22                          | (11) EP3481577                                 |
| F01D 25/00                             | C22C 38/26                          | (21) EP17711198.6                              |
| F23R 3/28                              | C22C 38/28                          | (22) 17.03.2017                                |
| B64F 5/30                              | C22C 38/32                          | (54) METHOD OF PROVIDING A METAL               |
| (11) EP3396116                         | C22C 38/38                          | WIRE TO A WELDING TORCH                        |
| (21) EP18169458.9                      | C22C 38/44                          | (73) Norsk Titanium AS                         |
| (22) 26.04.2018                        | C22C 38/46                          | (72) VIGDAL, Brede                             |
|                                        | C22C 38/48                          | BERG HAGA, Hans-Martin                         |
|                                        | C22C 38/50                          | FALLA, Tom-Erik                                |

|                                   |                                              |                                                |
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| (74) dr. A. Krebs                 | (74) ir. M.F.J.M. Ketelaars c.s.             | (51) B26B 5/00                                 |
| (31) 201615206171                 | (31) 20110143966                             | B26B 11/00                                     |
| (32) 08.07.2016                   | 20120151508                                  | B26B 27/00                                     |
| (33) United States of America     | (32) 27.12.2011                              | (11) EP3403777                                 |
| (47) 26.05.2021                   | 21.12.2012                                   | (21) EP18000278.4                              |
| (51) B23K 10/00                   | (33) Korea (Republic)                        | (22) 20.03.2018                                |
| B23K 26/08                        | Korea (Republic)                             | (54) KNIFE                                     |
| B23K 26/38                        | (47) 07.04.2021                              | (73) Martor KG                                 |
| (11) EP3466593                    | (51) B24C 1/00                               | (72) Hendricks, Jan                            |
| (21) EP18197320.7                 | B24C 5/04                                    | (74) ir. F.A. Geurts c.s.                      |
| (22) 27.09.2018                   | F01D 25/00                                   | (31) 102017004691                              |
| (54) APPARATUS AND METHOD FOR     | B64F 5/00                                    | (32) 17.05.2017                                |
| LASER OR PLASMA CUTTING OF        | (11) EP3189934                               | (33) Germany                                   |
| PIECES OF LAMINAR MATERIAL        | (21) EP17150138.0                            | (47) 21.04.2021                                |
| WOUND IN COIL                     | (22) 28.11.2014                              | (51) B26B 21/40                                |
| (73) Dallan S.p.A.                | (54) DEVICE FOR CLEANING A JET               | B26B 21/60                                     |
| (72) DALLAN, Andrea               | ENGINE                                       | C23C 14/06                                     |
| (74) J.M.H. Duyver lic.           | (73) Lufthansa Technik AG                    | (11) EP3175014                                 |
| (31) 201700111570                 | (72) APPEL, Holger                           | (21) EP15744564.4                              |
| (32) 05.10.2017                   | BRÄUTIGAM, Klaus                             | (22) 30.07.2015                                |
| (33) Italy                        | (74) J.M.H. Duyver lic.                      | (54) RAZOR BLADE COATING                       |
| (47) 05.05.2021                   | (31) 102013224639                            | (73) BIC-Violex S.A.                           |
| (51) B23K 20/10                   | (32) 29.11.2013                              | (72) LOGOTHETIDIS, Stergios                    |
| B23K 37/04                        | (33) Germany                                 | KALFAGIANNIS, Nikolaos                         |
| B23Q 1/54                         | (47) 07.04.2021                              | MAVROIDIS, Constantinos                        |
| B23Q 3/06                         | (51) B24D 5/04                               | PAPACHRISTOS, Vassilis                         |
| B29C 65/08                        | B24D 7/04                                    | KARO USSIS, Michalis                           |
| (11) EP3310529                    | (11) EP3700712                               | (74) dr. W.A.H.M. Van Borm                     |
| (21) EP16731041.6                 | (21) EP19700702.4                            | (31) PCT/EP2014/066511                         |
| (22) 06.06.2016                   | (22) 14.01.2019                              | (32) 31.07.2014                                |
| (54) WORKPIECE HOLDING DEVICE     | (54) GRINDING DISC AND USE OF SUCH A         | (33) World Intellectual Property Office (WIPO) |
| (73) Pentracor GmbH               | GRINDING DISC                                | (47) 19.05.2021                                |
| (72) ENDRULLAT, Thomas            | (73) August Rüggeberg GmbH & Co. KG          | (51) B26D 7/08                                 |
| (74) ir. M.F.J.M. Ketelaars c.s.  | (72) GEHRMANN, Stefan                        | B29C 65/08                                     |
| (31) 15172248                     | HENN, Frank                                  | B29K 101/12                                    |
| (32) 16.06.2015                   | SCHMITZ, Achim                               | B29L 31/48                                     |
| (33) European Patent Office (EPO) | SCHUMACHER, Fabian                           | B31F 5/00                                      |
| (47) 28.04.2021                   | (74) ir. J.C. Volmer c.s.                    | (11) EP3368294                                 |
| (51) B23K 35/30                   | (47) 14.04.2021                              | (21) EP15907481.4                              |
| C21D 6/00                         | (51) B25B 13/50                              | (22) 29.10.2015                                |
| C21D 9/46                         | E21B 19/16                                   | (54) ULTRASONIC ANVIL HAVING LOW               |
| C21D 9/50                         | (11) EP3137261                               | TRANSMISSIBILITY                               |
| C22C 38/00                        | (21) EP15718232.0                            | (73) Kimberly-Clark Worldwide, Inc.            |
| C22C 38/04                        | (22) 25.04.2015                              | (72) MALCHOW, Gregory L.                       |
| C22C 38/20                        | (54) TONGS SYSTEM FOR USE ON A               | RAJALA, Gregory John                           |
| C22C 38/24                        | DRILLING INSTALLATION                        | (74) dr. W.A.H.M. Van Borm                     |
| C22C 38/26                        | (73) Bentec GmbH Drilling & Oilfield Systems | (47) 12.05.2021                                |
| C22C 38/28                        | (72) CORDES, Malte                           | (51) B26D 7/32                                 |
| C22C 38/38                        | SCHMIDT, Heiko                               | B65H 16/02                                     |
| C22C 38/60                        | REUTER, André                                | B65H 16/10                                     |
| (11) EP2799571                    | (74) ir. M.F.J.M. Ketelaars c.s.             | B65H 20/02                                     |
| (21) EP12862659.5                 | (31) 102014208113                            | B65H 35/08                                     |
| (22) 27.12.2012                   | (32) 29.04.2014                              | (11) EP3424854                                 |
| (54) AUSTENITIC STEEL HAVING      | (33) Germany                                 | (21) EP18181280.1                              |
| EXCELLENT MACHINABILITY           | (47) 05.05.2021                              | (22) 02.07.2018                                |
| AND ULTRA-LOW TEMPERATURE         | (51) B26B 3/00                               | (54) PROVISION OF WEB-SHAPED SHEET             |
| TOUGHNESS IN WELD HEAT-           | B26B 11/00                                   | MATERIAL TO A CUTTING AREA                     |
| AFFECTED ZONE, AND METHOD OF      | (11) EP3257639                               | (73) Weber Maschinenbau GmbH                   |
| MANUFACTURING THE SAME            | (21) EP17176374.1                            | Breidenbach                                    |
| (73) Posco                        | (22) 16.06.2017                              | (72) Einloft-Velte, Tobias                     |
| (72) LEE, Soon-Gi                 | (54) KNIFE WITH PRESSURE INDICATION          | Nispel, Thomas                                 |
| CHOI, Jong-Kyo                    | (73) RiteSafetyProducts                      | Ritzen, Noël                                   |
| PARK, Young-Hwan                  | (72) LANDWEHR, Thomas Jay                    | (74) ir. M.F.J.M. Ketelaars c.s.               |
| NOH, Hee-Goon                     | (31) 201615185163                            | (31) 102017114758                              |
| CHO, Hyun-Kwan                    | (32) 17.06.2016                              | 102017118930                                   |
| SUH, In-Shik                      | (33) United States of America                | (32) 03.07.2017                                |
| PARK, In-Gyu                      | (47) 26.05.2021                              | 18.08.2017                                     |
| LEE, Hong-Ju                      |                                              | (33) Germany                                   |



|                                        |                                               |                                    |
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| Germany                                | F03D 1/06                                     | (11) EP3116701                     |
| (47) 19.05.2021                        | B29D 99/00                                    | (21) EP15706241.5                  |
| (51) B27N 1/00                         | (11) EP2918399                                | (22) 25.02.2015                    |
| C07C 51/42                             | (21) EP14158529.9                             | (54) HOSE EXTRUSION HEAD AND       |
| C07C 51/44                             | (22) 10.03.2014                               | METHOD FOR PRODUCING A HOSE        |
| C07C 57/08                             | (54) A method for manufacturing a rotor blade | (73) KraussMaffei Extrusion GmbH   |
| C08H 8/00                              | for a wind turbine                            | (72) REINEKE, Frank                |
| (11) EP3183100                         | (73) Siemens Gamesa Renewable Energy A/       | HEPKE, Harald                      |
| (21) EP15757169.6                      | S                                             | (74) ir. F.A. Geurts c.s.          |
| (22) 13.08.2015                        | (72) Kirkeby, Klaus                           | (31) 102014103521                  |
| (54) PROCESS FOR THE RECOVERY          | Overgaard, Anders                             | (32) 14.03.2014                    |
| OF CARBOXYLIC ACID AND WOOD            | (74) ir. M.F.J.M. Ketelaars c.s.              | (33) Germany                       |
| TREATMENT PROCESS                      | (47) 28.04.2021                               | (47) 21.04.2021                    |
| (73) Rhodia Acetow GmbH                | (51) B29C 33/68                               | (51) B29C 51/00                    |
| (72) KRUMREY, Thomas                   | B29C 43/02                                    | (11) EP3544785                     |
| HUMMEL, Andreas                        | B29C 43/32                                    | (21) EP17817274.8                  |
| HÖLTER, Dirk                           | B29C 43/36                                    | (22) 28.11.2017                    |
| (74) ir. M.F.J.M. Ketelaars c.s.       | B29C 43/56                                    | (54) THERMOFORMED ARTICLE          |
| (31) 14181419                          | B29K 105/00                                   | OF POLY(ETHYLENE 2,5               |
| (32) 19.08.2014                        | B29L 31/40                                    | FURANDICARBOXYLATE) POLYESTER      |
| (33) European Patent Office (EPO)      | (11) EP3160706                                | (73) Furanix Technologies B.V      |
| (47) 31.03.2021                        | (21) EP15731940.1                             | (72) BERNY, Benoit Jacques         |
| (51) B29B 7/00                         | (22) 26.06.2015                               | ACQUASANTA, Francesco              |
| B29B 7/38                              | (54) APPARATUS, METHOD AND                    | FLACELIÈRE, Julia Thérèse Paulette |
| B29B 7/60                              | SYSTEM FOR MOULDING A                         | VAN BERKEL, Jesper Gabriël         |
| B29B 7/74                              | THERMOPLASTIC MATERIAL BY                     | (74) ir. J.C. Volmer c.s.          |
| B29B 7/82                              | VACUUM COMPRESSION MOULDING                   | (31) 2017874                       |
| B29B 7/90                              | (73) Meltprep GmbH                            | (32) 28.11.2016                    |
| B29C 43/24                             | (72) TREFFER, Daniel                          | (33) Netherlands                   |
| B29K 27/06                             | GRUBBAUER, Johann                             | (47) 09.06.2021                    |
| B29K 105/00                            | KOSCHER, Gerold                               | (51) B29C 53/78                    |
| B29K 105/16                            | KLEIN, Thomas                                 | F16L 11/112                        |
| B29K 491/00                            | KHINAST, Johannes                             | F16L 11/118                        |
| B29L 7/00                              | (74) ir. W.J.J.M. Kempes                      | F16L 11/127                        |
| B32B 3/02                              | (31) 201411400                                | F16L 11/24                         |
| B32B 3/06                              | (32) 26.06.2014                               | (11) EP3485190                     |
| B32B 3/30                              | (33) United Kingdom                           | (21) EP17742216.9                  |
| B32B 5/16                              | (47) 31.03.2021                               | (22) 12.07.2017                    |
| B32B 9/02                              | (51) B29C 45/26                               | (54) HOSE LINE FOR TRANSPORTING    |
| B32B 9/04                              | B29C 45/27                                    | ABRASIVE MEDIA AND METHOD AND      |
| B32B 21/12                             | B29L 31/56                                    | DEVICE FOR ITS MANUFACTURE         |
| B32B 21/14                             | (11) EP3424676                                | (73) Masterflex SE                 |
| B32B 27/14                             | (21) EP18185884.6                             | (72) NÜßEN, Stefan                 |
| B32B 27/30                             | (22) 01.06.2016                               | KAPTEINA, Tanja                    |
| C08J 3/20                              | (54) INJECTION MOLDING APPARATUS              | JACOBI, Joachim                    |
| C08K 3/26                              | (73) Husky Injection Molding Systems Ltd.     | (74) ir. M.F.J.M. Ketelaars c.s.   |
| E04F 15/10                             | (72) Mai, Arnold Heinz                        | (31) 16179469                      |
| B29C 48/07                             | (74) ir. M.F.J.M. Ketelaars c.s.              | (32) 14.07.2016                    |
| B29C 48/285                            | (31) 201562189827 P                           | (33) European Patent Office (EPO)  |
| B29C 48/793                            | (32) 08.07.2015                               | (47) 05.05.2021                    |
| B29C 48/797                            | (33) United States of America                 | (51) B29C 64/255                   |
| (11) EP3703926                         | (47) 14.04.2021                               | B29C 67/00                         |
| (21) EP18796918.3                      | (51) B29C 48/08                               | (11) EP3463817                     |
| (22) 01.11.2018                        | B29C 48/68                                    | (21) EP17803370.0                  |
| (54) METHOD FOR PRODUCING AN           | (11) EP3088157                                | (22) 22.05.2017                    |
| EXTRUDED SHEET                         | (21) EP16167627.5                             | (54) POWDER-LAYER THREE-           |
| (73) Flooring Industries Limited, SARL | (22) 29.04.2016                               | DIMENSIONAL PRINTER COMPRISING     |
| (72) GRAFENAUER, Thomas                | (54) FILTER FOR PLASTIC MATERIAL              | A RECOATER                         |
| (74) ir. W.J.J.M. Kempes               | (73) Fimic S.r.l.                             | (73) The Exone Company             |
| (31) 102017125743                      | (72) Canaia, Erica                            | (72) DUGAN, Anthony, S.            |
| (32) 03.11.2017                        | (31) UB20150321                               | KLEIN, Andrew, P.                  |
| (33) Germany                           | (32) 30.04.2015                               | BOLT, Joseph, J.                   |
| (47) 14.04.2021                        | (33) Italy                                    | (74) ir. A.R. Aalbers              |
| (51) B29C 33/00                        | (47) 12.05.2021                               | (31) 201615161361                  |
| B29C 33/76                             | (51) B29C 48/09                               | (32) 23.05.2016                    |
| B29C 70/34                             | B29C 48/10                                    | (33) United States of America      |
| B29C 70/46                             | B29C 48/325                                   | (47) 07.04.2021                    |
| B29L 31/08                             | B29C 48/92                                    | (51) B29C 65/00                    |

|                                         |                                   |                                    |
|-----------------------------------------|-----------------------------------|------------------------------------|
| B29C 65/70                              | E04F 13/08                        | (54) METHOD OF FORMING             |
| B29C 70/44                              | (11) EP3006642                    | ANTIREFLECTION OPTICAL BODY,       |
| B29C 70/84                              | (21) EP15188867.4                 | AND DISPLAY PANEL                  |
| B29D 22/00                              | (22) 08.10.2015                   | (73) Dexerials Corporation         |
| B29D 22/02                              | (54) BUILDING PANELS COMPRISING A | (72) KAJIYA, Shunichi              |
| B65D 88/12                              | CONSTRUCTION PLATE AND A MESH     | (74) ir. J.D. de Zeeuw             |
| B65D 90/08                              | STRUCTURE AND PROCESS FOR         | (31) 2015247857                    |
| B65D 90/52                              | MANUFACTURING THE BUILDING        | (32) 18.12.2015                    |
| (11) EP3670387                          | PANEL                             | (33) Japan                         |
| (21) EP19218091.7                       | (73) GAMORINE NV                  | (47) 12.05.2021                    |
| (22) 19.12.2019                         | (72) Vereecke, Thierry            | (51) B32B 15/08                    |
| (54) METHOD FOR MANUFACTURING A         | (74) dr. A. Ellens c.s.           | B32B 15/082                        |
| TANK FROM COMPOSITE MATERIALS           | (31) 14188122                     | B32B 15/20                         |
| FOR TRANSPORTING LIQUID                 | (32) 08.10.2014                   | B32B 21/08                         |
| PRODUCTS AND ASSOCIATED TANK            | (33) European Patent Office (EPO) | B32B 27/30                         |
| (73) Etablissements MAGYAR              | (47) 12.05.2021                   | C08J 7/04                          |
| (72) MAGYAR, Daniel                     | (51) B32B 3/26                    | (11) EP3145715                     |
| MAGYAR, Laurent                         | B32B 15/08                        | (21) EP15724578.8                  |
| (74) J.M.H. Duyver lic.                 | B32B 15/085                       | (22) 15.05.2015                    |
| (31) 1873732                            | B32B 15/095                       | (54) STYRENE COPOLYMER COMPOSITE   |
| (32) 21.12.2018                         | B32B 15/098                       | FILM                               |
| (33) France                             | B32B 15/20                        | (73) INEOS Styrolution Group GmbH  |
| (47) 21.04.2021                         | B32B 27/30                        | (72) LEE, Jaehee                   |
| (51) B29C 70/34                         | B32B 27/32                        | HAN, JaeSung                       |
| B29C 70/86                              | B32B 27/40                        | LEE, Jong Hoo                      |
| (11) EP3162546                          | B32B 27/42                        | (74) ir. M.F.J.M. Ketelaars c.s.   |
| (21) EP16194886.4                       | E04D 13/14                        | (31) 14168897                      |
| (22) 20.10.2016                         | E04D 13/147                       | (32) 19.05.2014                    |
| (54) TRACTION ELEMENT MADE FROM         | (11) EP3240684                    | (33) European Patent Office (EPO)  |
| FIBRE-REINFORCED PLASTIC AND            | (21) EP15839075.7                 | (47) 28.04.2021                    |
| METHOD                                  | (22) 28.12.2015                   | (51) B32B 15/09                    |
| (73) Technische Universität Berlin      | (54) CONSTRUCTION MATERIAL        | (11) EP3278980                     |
| (72) Zwingmann, Bernd                   | (73) Redehold Apeldoorn B.V.      | (21) EP16773140.5                  |
| Liu, Yue                                | (72) BATENBURG, Lawrence Fabian   | (22) 31.03.2016                    |
| Schlaich, Mike                          | VAN TILBURG, Henricus Johannes    | (54) LAMINATED METAL SHEET FOR     |
| (74) dr. W.A.H.M. Van Borm              | Maria                             | CONTAINER                          |
| (31) 102015220581                       | (74) ir. H.A. Witmans c.s.        | (73) JFE Steel Corporation         |
| (32) 21.10.2015                         | (31) 14200418                     | (72) NAKAMURA, Norihiko            |
| (33) Germany                            | (32) 29.12.2014                   | KITAGAWA, Junichi                  |
| (47) 31.03.2021                         | (33) European Patent Office (EPO) | NAKAMARU, Hiroki                   |
| (51) B29D 30/32                         | (47) 28.04.2021                   | YAMANAKA, Yoichiro                 |
| (11) EP3638498                          | (51) B32B 7/12                    | (74) mr.ir. F.N. Ferro             |
| (21) EP18733162.4                       | B32B 21/13                        | (31) 2015070504                    |
| (22) 11.05.2018                         | B32B 27/42                        | (32) 31.03.2015                    |
| (54) METHOD AND DEVICE FOR              | (11) EP3433097                    | (33) Japan                         |
| PRODUCING TIRES                         | (21) EP17726340.7                 | (47) 02.06.2021                    |
| (73) Harburg-Freudenberger Maschinenbau | (22) 24.03.2017                   | (51) B32B 17/10                    |
| GmbH                                    | (54) METHOD OF MANUFACTURING A    | B64C 1/14                          |
| (72) WACHTER, Markus                    | WOOD VENEER PRODUCT AND A         | B64D 45/02                         |
| BEHRENS, Achim                          | WOOD VENEER PRODUCT THUS          | (11) EP3648971                     |
| LANGE-KRAUEL, Thomas                    | OBTAINED                          | (21) EP18765686.3                  |
| (74) ir. H.J.G. Lips c.s.               | (73) Metsäliitto Osuuskunta       | (22) 06.07.2018                    |
| (31) 102017005832                       | (72) SOKKA, Kasperi               | (54) ELECTROSTATIC DISCHARGE NOISE |
| (32) 16.06.2017                         | (74) J.M.H. Duyver lic.           | SUPPRESSION BY CONDUCTION          |
| (33) Germany                            | (31) 20165249                     | BETWEEN A TIERED METALLIC          |
| (47) 19.05.2021                         | (32) 24.03.2016                   | ELEMENT AND THE ELECTRICAL         |
| (51) B32B 3/02                          | (33) Finland                      | SYSTEM OF A GLAZING                |
| B32B 3/26                               | (47) 05.05.2021                   | (73) SAINT-GOBAIN GLASS FRANCE     |
| B32B 3/30                               | (51) B32B 9/00                    | AIRBUS OPERATIONS (S.A.S.)         |
| B32B 5/18                               | C09J 4/04                         | (72) DEBRUS, Marie-Hélène          |
| B32B 7/12                               | C09J 5/00                         | TONDU, Thomas                      |
| B32B 9/02                               | C09J 201/00                       | UNFER, Catherine                   |
| B32B 15/18                              | G02B 1/118                        | FLOURENS, Franck                   |
| B32B 27/30                              | B32B 7/02                         | DELVERDIER, Osmin                  |
| B32B 27/40                              | B32B 7/06                         | CANALES, Hugo                      |
| E04B 1/76                               | (11) EP3392683                    | (74) ir. W.J.J.M. Kempes           |
| E04C 2/284                              | (21) EP16875808.4                 | (31) 1700719                       |
| E04F 13/04                              | (22) 16.12.2016                   | (32) 06.07.2017                    |

|                                                                                                                     |                                                        |                                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (33) France                                                                                                         | (54) PRINTING FLUID DRYING ASSEMBLY, METHOD AND SYSTEM | D21H 11/18                                                                                                                                                                                                        |
| (47) 19.05.2021                                                                                                     |                                                        | D21H 19/10                                                                                                                                                                                                        |
| (51) B32B 17/10                                                                                                     | (73) HP Scitex Ltd                                     | D21H 19/52                                                                                                                                                                                                        |
| B64C 1/14                                                                                                           | (72) VEIS, Alex                                        | D21H 21/18                                                                                                                                                                                                        |
| B64D 45/02                                                                                                          | (74) dr. W.A.H.M. Van Borm                             | D21H 21/40                                                                                                                                                                                                        |
| (11) EP3648972                                                                                                      | (47) 02.06.2021                                        | D21H 23/22                                                                                                                                                                                                        |
| (21) EP18765687.1                                                                                                   | (51) B41F 35/04                                        | (11) EP3228744                                                                                                                                                                                                    |
| (22) 06.07.2018                                                                                                     | (11) EP3197681                                         | (21) EP16164082.6                                                                                                                                                                                                 |
| (54) ELECTROSTATIC DISCHARGE NOISE SUPPRESSION BY CONDUCTION BETWEEN A TIERED METALLIC ELEMENT AND THE WINDOW PRESS | (21) EP15791006.8                                      | (22) 06.04.2016                                                                                                                                                                                                   |
| (73) SAINT-GOBAIN GLASS FRANCE                                                                                      | (54) IMPROVED WIPER BLADE FOR PRINTER ROLLER           | (54) USE OF NANO CELLULOSE ON A PAPER PRODUCT                                                                                                                                                                     |
| AIRBUS OPERATIONS (S.A.S.)                                                                                          | (73) Rogerson, Mark                                    | (73) European Central Bank                                                                                                                                                                                        |
| (72) DEBRUS, Marie-Hélène                                                                                           | (72) Rogerson, Mark                                    | (72) Bras, Julien                                                                                                                                                                                                 |
| TONDU, Thomas                                                                                                       | (74) ir. M.F.J.M. Ketelaars c.s.                       | Dufresne, Alain                                                                                                                                                                                                   |
| CANALES, Hugo                                                                                                       | (31) 201417029                                         | Desmaisons, Johanna                                                                                                                                                                                               |
| FLOURENS, Frank                                                                                                     | 201500331                                              | Roberty, Gilles                                                                                                                                                                                                   |
| UNFER, Catherine                                                                                                    | (32) 26.09.2014                                        | Lutsche, Marion                                                                                                                                                                                                   |
| DELVERDIER, Osmin                                                                                                   | 09.01.2015                                             | (74) ir. A. Blokland c.s.                                                                                                                                                                                         |
| (74) ir. W.J.J.M. Kempes                                                                                            | (33) United Kingdom                                    | (47) 02.06.2021                                                                                                                                                                                                   |
| (31) 1700720                                                                                                        | United Kingdom                                         | (51) B44C 5/04                                                                                                                                                                                                    |
| (32) 06.07.2017                                                                                                     | (47) 07.04.2021                                        | F21V 33/00                                                                                                                                                                                                        |
| (33) France                                                                                                         | (51) B41J 2/045                                        | (11) EP3416831                                                                                                                                                                                                    |
| (47) 19.05.2021                                                                                                     | (11) EP3758941                                         | (21) EP17711798.3                                                                                                                                                                                                 |
| (51) B32B 27/08                                                                                                     | (21) EP17740581.8                                      | (22) 17.02.2017                                                                                                                                                                                                   |
| B32B 27/36                                                                                                          | (22) 06.07.2017                                        | (54) A DECORATIVE PANEL                                                                                                                                                                                           |
| B32B 7/06                                                                                                           | (54) SELECTORS FOR NOZZLES AND MEMORY ELEMENTS         | (73) Trespa International B.V.                                                                                                                                                                                    |
| (11) EP2722168                                                                                                      | (73) Hewlett-Packard Development Company, L.P.         | (72) KJELLANDER, Birgitta Katarina Charlotte                                                                                                                                                                      |
| (21) EP13004826.7                                                                                                   | (72) NG, Boon Bing                                     | KÖMHOFF, Henricus Hubertus Maria                                                                                                                                                                                  |
| (22) 08.10.2013                                                                                                     | PAN, Rui                                               | (74) ir. A. Blokland c.s.                                                                                                                                                                                         |
| (54) A reclosable package                                                                                           | SUDHAKAR, Mohan Kumar                                  | (31) 2016282                                                                                                                                                                                                      |
| (73) Wipak Walsrode GmbH & Co. KG                                                                                   | HALL, Brendan                                          | (32) 18.02.2016                                                                                                                                                                                                   |
| (72) Sperlich, Bernd, Dr.                                                                                           | (74) dr. W.A.H.M. Van Borm                             | (33) Netherlands                                                                                                                                                                                                  |
| Dohmeier, Stefan                                                                                                    | (47) 09.06.2021                                        | (47) 23.06.2021                                                                                                                                                                                                   |
| Nelke-Bruhn, Dorit                                                                                                  | (51) B41J 11/00                                        | (51) B60C 23/00                                                                                                                                                                                                   |
| (74) ir. W.J.J.M. Kempes                                                                                            | B44C 5/04                                              | (11) EP3530494                                                                                                                                                                                                    |
| (31) 102012020533                                                                                                   | H04N 1/387                                             | (21) EP19168211.1                                                                                                                                                                                                 |
| (32) 19.10.2012                                                                                                     | (11) EP3102425                                         | (22) 11.11.2014                                                                                                                                                                                                   |
| (33) Germany                                                                                                        | (21) EP15702271.6                                      | (54) ROTARY UNION FOR TIRE INFLATION SYSTEM                                                                                                                                                                       |
| (47) 14.04.2021                                                                                                     | (22) 03.02.2015                                        | (73) Equalaire Systems, Inc.                                                                                                                                                                                      |
| (51) B33Y 30/00                                                                                                     | (54) MANUFACTURING OF DECORATIVE WORKPIECES BY INKJET  | (72) HENNIG, Mark, Kevin                                                                                                                                                                                          |
| B29C 64/118                                                                                                         | (73) AGFA NV                                           | SNIDER, James, Raymond                                                                                                                                                                                            |
| B29C 64/209                                                                                                         | Unilin, BV                                             | (74) ir. M.F.J.M. Ketelaars c.s.                                                                                                                                                                                  |
| (11) EP3589476                                                                                                      | (72) VAN GARSSE, Joris                                 | (31) 201361902476 P                                                                                                                                                                                               |
| (21) EP18706285.6                                                                                                   | MEERSSEMAN, Laurent                                    | (32) 11.11.2013                                                                                                                                                                                                   |
| (22) 27.02.2018                                                                                                     | (31) 14154310                                          | (33) United States of America                                                                                                                                                                                     |
| (54) PRINT HEAD, METHOD AND SYSTEM FOR 3D PRINTING WITH VARIABLE DISPENSING RATE                                    | (32) 07.02.2014                                        | (47) 26.05.2021                                                                                                                                                                                                   |
| (73) Covestro Deutschland AG                                                                                        | (33) European Patent Office (EPO)                      | (51) B60D 1/36                                                                                                                                                                                                    |
| (72) ACHTEN, Dirk                                                                                                   | (47) 30.06.2021                                        | B60D 1/62                                                                                                                                                                                                         |
| BÜSGEN, Thomas                                                                                                      | (51) B41J 29/13                                        | B60R 1/00                                                                                                                                                                                                         |
| AKBAS, Levent                                                                                                       | B41J 29/377                                            | B60R 11/00                                                                                                                                                                                                        |
| DEGIORGIO, Nicolas                                                                                                  | (11) EP3549779                                         | B60R 11/04                                                                                                                                                                                                        |
| KÜNZEL, Jonas                                                                                                       | (21) EP19172950.8                                      | (11) EP3752375                                                                                                                                                                                                    |
| (74) ir. W.J.J.M. Kempes                                                                                            | (22) 19.09.2014                                        | (21) EP19705152.7                                                                                                                                                                                                 |
| (31) 17158281                                                                                                       | (54) PORTABLE CLEANROOM PRINTING CABINET               | (22) 11.02.2019                                                                                                                                                                                                   |
| (32) 28.02.2017                                                                                                     | (73) Veltek Associates, INC.                           | (54) MOBILE SENSOR DEVICE FOR A TRACTOR-TRAILER COMBINATION, ARRANGEMENT OF MOBILE SENSOR DEVICES ON A SEMITRAILER, METHOD FOR ACQUIRING INFORMATION FOR A TRACTOR-TRAILER COMBINATION, CENTRAL UNIT, AND TRACTOR |
| (33) European Patent Office (EPO)                                                                                   | (72) VELLUTATO, Arthur L. Jr.                          | (73) SAF-HOLLAND GmbH                                                                                                                                                                                             |
| (47) 14.04.2021                                                                                                     | (74) dr. A. Krebs                                      | (72) HARTMANN, Mark                                                                                                                                                                                               |
| (51) B41F 23/04                                                                                                     | (31) 201314033045                                      | BRUNSCH, Bernd                                                                                                                                                                                                    |
| B41J 11/00                                                                                                          | (32) 20.09.2013                                        | (74) ir. A. Blokland c.s.                                                                                                                                                                                         |
| B41M 7/00                                                                                                           | (33) United States of America                          |                                                                                                                                                                                                                   |
| (11) EP3470231                                                                                                      | (47) 16.06.2021                                        |                                                                                                                                                                                                                   |
| (21) EP17195744.2                                                                                                   | (51) B42D 15/00                                        |                                                                                                                                                                                                                   |
| (22) 10.10.2017                                                                                                     |                                                        |                                                                                                                                                                                                                   |

|                                                                                                                  |                                                                              |                                                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (31) 102018103537                                                                                                | (33) United States of America                                                | (32) 30.08.2016                                                                                                                                                      |
| (32) 16.02.2018                                                                                                  | (47) 05.05.2021                                                              | (33) Italy                                                                                                                                                           |
| (33) Germany                                                                                                     | (51) B60R 3/02                                                               | (47) 28.04.2021                                                                                                                                                      |
| (47) 26.05.2021                                                                                                  | E04F 11/02                                                                   | (51) B62B 7/06                                                                                                                                                       |
| (51) B60G 7/02                                                                                                   | E04F 11/035                                                                  | B62B 9/10                                                                                                                                                            |
| (11) EP3330110                                                                                                   | E04F 11/06                                                                   | (11) EP3459817                                                                                                                                                       |
| (21) EP17204333.3                                                                                                | (11) EP3334873                                                               | (21) EP18195723.4                                                                                                                                                    |
| (22) 29.11.2017                                                                                                  | (21) EP16834315.0                                                            | (22) 20.09.2018                                                                                                                                                      |
| (54) BEARING BLOCK FOR FIXING A<br>BEAM AXLE LONGITUDINAL ARM<br>WITH COMPONENT AFFECTING<br>OPERATING LOAD CASE | (22) 10.08.2016                                                              | (54) CHILD STROLLER APPARATUS                                                                                                                                        |
| (73) JOST-Werke Deutschland GmbH                                                                                 | (54) RETRACTABLE STAIRCASE                                                   | (73) Wonderland Switzerland AG                                                                                                                                       |
| (72) Leiß, Jan                                                                                                   | (73) Bianchi, Zev                                                            | (72) Duan, Xiao Song                                                                                                                                                 |
| (72) Pentin, Paul                                                                                                | (72) Bianchi, Zev                                                            | Zeng, Haibo                                                                                                                                                          |
| (74) ir. F.A. Geurts c.s.                                                                                        | (74) ir. A. Blokland c.s.                                                    | Li, Fang Ming                                                                                                                                                        |
| (31) 102016223861                                                                                                | (31) 2015903242                                                              | (74) ir. W.J.J.M. Kempes                                                                                                                                             |
| (32) 30.11.2016                                                                                                  | (32) 11.08.2015                                                              | (31) 201710854623                                                                                                                                                    |
| (33) Germany                                                                                                     | (33) Australia                                                               | 201711002973                                                                                                                                                         |
| (47) 14.04.2021                                                                                                  | (47) 28.04.2021                                                              | (32) 20.09.2017                                                                                                                                                      |
| (51) B60H 1/00                                                                                                   | (51) B60T 1/10                                                               | 24.10.2017                                                                                                                                                           |
| B61D 27/00                                                                                                       | B60T 8/1761                                                                  | (33) China                                                                                                                                                           |
| (11) EP3600926                                                                                                   | B60T 8/1766                                                                  | China                                                                                                                                                                |
| (21) EP18713809.4                                                                                                | B60T 8/88                                                                    | (47) 12.05.2021                                                                                                                                                      |
| (22) 07.03.2018                                                                                                  | (11) EP3369633                                                               | (51) B62D 35/00                                                                                                                                                      |
| (54) AIR DUCT FOR INSTALLATION IN A<br>VEHICLE                                                                   | (21) EP16858882.0                                                            | (11) EP3577015                                                                                                                                                       |
| (73) Siemens Mobility GmbH                                                                                       | (22) 26.09.2016                                                              | (21) EP16813265.2                                                                                                                                                    |
| (72) ROHWERDER, Dirk                                                                                             | (54) ACTIVE SAFETY CONTROL SYSTEM<br>AND METHOD FOR VEHICLE                  | (22) 03.02.2017                                                                                                                                                      |
| (74) ir. M.F.J.M. Ketelaars c.s.                                                                                 | (73) BYD Company Limited                                                     | (54) AERODYNAMIC SYSTEM WITH DUAL<br>ZONE FAIRING FOR TRUCK                                                                                                          |
| (31) 102017205527                                                                                                | (72) LIAN, Yubo                                                              | (73) Compagnie Générale des<br>Etablissements Michelin                                                                                                               |
| (32) 31.03.2017                                                                                                  | LUO, Hongbin                                                                 | (72) BRADLEY, Calvin, Rhett                                                                                                                                          |
| (33) Germany                                                                                                     | ZHANG, Jintao                                                                | (74) ir. H.A. Witmans c.s.                                                                                                                                           |
| (47) 28.04.2021                                                                                                  | YANG, Dongsheng                                                              | (47) 14.04.2021                                                                                                                                                      |
| (51) B60K 28/02                                                                                                  | (74) ir. W.J.J.M. Kempes                                                     | (51) B62J 7/08                                                                                                                                                       |
| G07C 5/08                                                                                                        | (31) 201510703791                                                            | B62J 15/00                                                                                                                                                           |
| B60W 40/09                                                                                                       | (32) 26.10.2015                                                              | B62J 11/00                                                                                                                                                           |
| G06Q 10/06                                                                                                       | (33) China                                                                   | (11) EP3434567                                                                                                                                                       |
| G06Q 40/08                                                                                                       | (47) 14.04.2021                                                              | (21) EP18185101.5                                                                                                                                                    |
| (11) EP3391305                                                                                                   | (51) B60W 30/06                                                              | (22) 24.07.2018                                                                                                                                                      |
| (21) EP16876154.2                                                                                                | B62D 13/06                                                                   | (54) BICYCLE COMPONENT                                                                                                                                               |
| (22) 15.12.2016                                                                                                  | B62D 15/02                                                                   | (73) Curana Invest bvba                                                                                                                                              |
| (54) METHOD AND SYSTEM<br>FOR ASSESSING THE TRIP<br>PERFORMANCE OF A DRIVER                                      | B62D 53/00                                                                   | (72) VENS, Dirk                                                                                                                                                      |
| (73) Greater Than SA                                                                                             | G05D 1/02                                                                    | (74) dr. W.A.H.M. Van Borm                                                                                                                                           |
| (72) LINDELÖF, Anders                                                                                            | (11) EP3283358                                                               | (31) 201705521                                                                                                                                                       |
| (74) ir. M.F.J.M. Ketelaars c.s.                                                                                 | (21) EP16780870.8                                                            | (32) 25.07.2017                                                                                                                                                      |
| (31) 1551651                                                                                                     | (22) 15.04.2016                                                              | (33) Belgium                                                                                                                                                         |
| (32) 15.12.2015                                                                                                  | (54) VEHICLE GUIDANCE SYSTEM                                                 | (47) 02.06.2021                                                                                                                                                      |
| (33) Sweden                                                                                                      | (73) Volvo Truck Corporation                                                 | (51) B62K 1/00                                                                                                                                                       |
| (47) 05.05.2021                                                                                                  | (72) BRENNAN, Sean Nicholas                                                  | H01M 2/10                                                                                                                                                            |
| (51) B60L 15/20                                                                                                  | DORRIS, James Theodore                                                       | H01M 10/04                                                                                                                                                           |
| B60L 50/50                                                                                                       | (74) dr. W.A.H.M. Van Borm                                                   | B62M 6/90                                                                                                                                                            |
| B60L 50/51                                                                                                       | (31) 201562148085 P                                                          | (11) EP3660942                                                                                                                                                       |
| B60L 50/60                                                                                                       | (32) 15.04.2015                                                              | (21) EP18208963.1                                                                                                                                                    |
| B60L 53/14                                                                                                       | (33) United States of America                                                | (22) 28.11.2018                                                                                                                                                      |
| B60L 53/24                                                                                                       | (47) 02.06.2021                                                              | (54) ENERGY STORAGE DEVICE<br>WHICH CAN BE ATTACHED TO A<br>TRANSPORT VEHICLE SUCH AS A<br>LOAD-CARRYING BICYCLE, A HAND<br>CART OR SIMILAR, AND BATTERY<br>FOR SAME |
| B60L 58/13                                                                                                       | (51) B61F 3/04                                                               | (73) BMZ Batterien-Montage-Zentrum GmbH                                                                                                                              |
| (11) EP3507132                                                                                                   | B61F 3/16                                                                    | (72) BAUER, Sven                                                                                                                                                     |
| (21) EP17859225.9                                                                                                | (11) EP3490867                                                               | (74) ir. J.C. Volmer c.s.                                                                                                                                            |
| (22) 05.10.2017                                                                                                  | (21) EP17768871.0                                                            | (47) 07.04.2021                                                                                                                                                      |
| (54) ELECTRIC VEHICLE                                                                                            | (22) 29.08.2017                                                              | (51) B62M 11/06                                                                                                                                                      |
| (73) Voltu Motor, Inc.                                                                                           | (54) PORTAL-AXLE OF LOW FLOOR RAIL<br>VEHICLES AND RAIL-AND-TRAM<br>VEHICLES | B62M 11/14                                                                                                                                                           |
| (72) GEBHART, Jorge Guillermo                                                                                    | (73) Lucchini RS S.p.A.                                                      | B62M 6/55                                                                                                                                                            |
| (74) ir. H.A. Witmans c.s.                                                                                       | (72) FENAROLI, Marco                                                         | (11) EP3507182                                                                                                                                                       |
| (31) 201662404706 P                                                                                              | CERVELLO, Steven                                                             |                                                                                                                                                                      |
| (32) 05.10.2016                                                                                                  | GALLO, Riccardo                                                              |                                                                                                                                                                      |
|                                                                                                                  | CANTINI, Stefano                                                             |                                                                                                                                                                      |
|                                                                                                                  | (74) J.M.H. Duyver lic.                                                      |                                                                                                                                                                      |
|                                                                                                                  | (31) 201600088005                                                            |                                                                                                                                                                      |

|                                   |                                        |                                  |
|-----------------------------------|----------------------------------------|----------------------------------|
| (21) EP17742708.5                 | ELECTRICALLY CONDUCTIVE LIQUID         | G06T 7/246                       |
| (22) 14.07.2017                   | DURING OPERATION THEREOF               | G06T 7/73                        |
| (54) DRIVE ASSEMBLY AND VEHICLE   | (73) Koninklijke Philips N.V.          | (11) EP3123260                   |
| (73) Robert Bosch GmbH            | (72) VISSER, Cornelis, Gerardus        | (21) EP14909276.9                |
| (72) HINTERKAUSEN, Markus         | VAN DELDEN, Martinus, Hermanus,        | (22) 31.12.2014                  |
| KIMMICH, Peter                    | Wilhelmus, Maria                       | (54) SELECTIVE PROCESSING OF     |
| (74) ir. H.A. Witmans c.s.        | (74) drs. O. Griebeling                | SENSOR DATA                      |
| (31) 102016216557                 | (31) 17199529                          | (73) SZ DJI Technology Co., Ltd. |
| (32) 01.09.2016                   | (32) 01.11.2017                        | (72) WANG, Tao                   |
| (33) Germany                      | (33) European Patent Office (EPO)      | YAN, Jiaqi                       |
| (47) 26.05.2021                   | (47) 31.03.2021                        | (74) ir. F.A. Geurts c.s.        |
| (51) B63B 21/10                   | (51) B63C 7/06                         | (47) 14.04.2021                  |
| B63B 21/18                        | B63C 7/10                              | (51) B64D 7/02                   |
| (11) EP2655179                    | (11) EP3512769                         | F41A 9/34                        |
| (21) EP11849983.9                 | (21) EP17767898.4                      | F41A 9/79                        |
| (22) 23.12.2011                   | (22) 07.09.2017                        | F41A 23/06                       |
| (54) FAIRLEAD LATCH DEVICE        | (54) APPARATUS AND METHOD FOR          | F41A 23/24                       |
| (73) Bardex Corporation           | LIFTING AND MOVING AN OBJECT           | F41A 27/18                       |
| (72) MILLER, Thomas               | UNDERWATER                             | (11) EP3172522                   |
| O'ROURKE, Charlie                 | (73) Aubin Limited                     | (21) EP15851334.1                |
| (74) mr.ir. F.N. Ferro            | (72) COLLINS, Patrick                  | (22) 20.07.2015                  |
| (31) 201061426635 P               | (74) dr. A. Krebs                      | (54) CONFIGURABLE WEAPON STATION |
| 201113335832                      | (31) 201615632                         | HAVING UNDER ARMOR RELOAD        |
| (32) 23.12.2010                   | (32) 14.09.2016                        | (73) Moog Inc.                   |
| 22.12.2011                        | (33) United Kingdom                    | (72) LUNG, Kevin                 |
| (33) United States of America     | (47) 31.03.2021                        | MARTINEZ, Matthew                |
| United States of America          | (51) B63H 20/00                        | MUELLER, Frank                   |
| (47) 26.05.2021                   | B63H 21/21                             | RHODES, David                    |
| (51) B63B 22/02                   | B63H 25/42                             | (74) ir. J.C. Volmer c.s.        |
| (11) EP3368404                    | (11) EP3434580                         | (31) 201414337422                |
| (21) EP16860549.1                 | (21) EP17770432.7                      | 201514802748                     |
| (22) 21.10.2016                   | (22) 24.03.2017                        | (32) 22.07.2014                  |
| (54) DISCONNECTABLE TOWER YOKE    | (54) SHIP                              | 17.07.2015                       |
| ASSEMBLY AND METHOD OF USING      | (73) Yanmar Power Technology Co., Ltd. | (33) United States of America    |
| SAME                              | (72) TAMURA Gakuji                     | United States of America         |
| (73) Sofec Inc.                   | OHASHI Ryosuke                         | (47) 21.04.2021                  |
| (72) LINDBLADE, Stephen P.        | (74) dr. W.A.H.M. Van Borm             | (51) B64D 37/14                  |
| (31) 201514923770                 | (31) 2016062859                        | B64D 37/16                       |
| (32) 27.10.2015                   | (32) 25.03.2016                        | B64F 1/28                        |
| (33) United States of America     | (33) Japan                             | G01F 22/00                       |
| (47) 23.06.2021                   | (47) 16.06.2021                        | G01F 23/00                       |
| (51) B63B 35/03                   | (51) B63H 21/17                        | B67D 7/04                        |
| B65G 23/14                        | H02H 3/087                             | B67D 7/08                        |
| B65H 51/14                        | H02H 3/32                              | B67D 7/30                        |
| E21B 19/22                        | H02H 7/26                              | B67D 7/32                        |
| F16L 1/23                         | H02J 1/10                              | (11) EP3427015                   |
| H02G 1/10                         | H02J 3/32                              | (21) EP16816330.1                |
| (11) EP3312486                    | H02J 7/00                              | (22) 21.11.2016                  |
| (21) EP16306384.5                 | H02M 7/00                              | (54) FUELLING METHOD             |
| (22) 21.10.2016                   | H03K 17/687                            | (73) I6 Group Limited            |
| (54) ADJUSTABLE TENSIONER PAD FOR | (11) EP3282584                         | (72) MATTOS, Alexander           |
| A TRACK-TYPE TENSIONER AND        | (21) EP16183842.0                      | UHRMACHER, Steven                |
| ASSOCIATED TENSIONER              | (22) 11.08.2016                        | HOLMES, Robert                   |
| (73) TECHNIP N-POWER              | (54) POWER DISTRIBUTION SYSTEM AND     | (74) ir. W.J.J.M. Kempes         |
| (72) NOGUEIRA, Rodrigo de Moura   | METHOD                                 | (31) 201604094                   |
| LOPES DE CASTRO, Mario Augusto    | (73) Siemens Energy AS                 | (32) 10.03.2016                  |
| (74) ir. M.F.J.M. Ketelaars c.s.  | (72) Haugan, Espen                     | (33) United Kingdom              |
| (47) 05.05.2021                   | (74) ir. M.F.J.M. Ketelaars c.s.       | (47) 21.04.2021                  |
| (51) B63B 59/04                   | (47) 07.04.2021                        | (51) B64D 39/00                  |
| H02G 1/10                         | (51) B64C 39/02                        | B64D 39/02                       |
| H05B 33/08                        | G01C 11/34                             | (11) EP3678938                   |
| (11) EP3704919                    | G01C 21/20                             | (21) EP19734136.5                |
| (21) EP18795567.9                 | G05D 1/10                              | (22) 06.06.2019                  |
| (22) 30.10.2018                   | G06K 9/00                              | (54) METHODS AND SYSTEMS FOR IN- |
| (54) AN ELECTRIC CURRENT SUPPLY   | G06K 9/36                              | FLIGHT FUELLING OF AIRCRAFT      |
| SYSTEM, DESIGNED TO BE AT LEAST   | H04N 5/232                             | (73) BRULIC LTD                  |
| PARTIALLY SUBMERGED IN AN         | H04N 5/243                             | (72) PITMAN, James               |
|                                   | H04N 7/18                              | (74) drs. C.M.A. Quintelier      |

|                                       |                                    |                                           |
|---------------------------------------|------------------------------------|-------------------------------------------|
| (31) 201815772                        | (11) EP3280646                     | (54) CONTINUOUS MOTION PRODUCT            |
| (32) 27.09.2018                       | (21) EP16777392.8                  | SELECTION AND GROUPING SYSTEM             |
| (33) United Kingdom                   | (22) 08.04.2016                    | AND METHOD OF GROUPING                    |
| (47) 02.06.2021                       | (54) STRETCH WRAPPING MACHINE      | PRODUCTS USING THE SYSTEM                 |
| (51) B64F 1/18                        | SUPPORTING TOP LAYER               | (73) Graphic Packaging International, LLC |
| H05B 47/155                           | CONTAINMENT OPERATIONS             | (72) BARBER, Jared B.                     |
| H05B 47/185                           | (73) Lantech.Com LLC               | FORD, Colin                               |
| (11) EP3471514                        | (72) LANCASTER, Patrick, R., III   | (74) ir. F.A. Geurts c.s.                 |
| (21) EP18198130.9                     | MITCHELL, Michael, P.              | (31) 201361957308 P                       |
| (22) 02.10.2018                       | JOHNSON, Richard, L.               | 201361845393 P                            |
| (54) LIGHTING SYSTEM WITH FACILITATED | (74) ir. H.A. Witmans c.s.         | (32) 28.06.2013                           |
| FIRMWARE UPDATING                     | (31) 201562145789 P                | 12.07.2013                                |
| (73) Energy Technology S.r.l.         | 201562232906 P                     | (33) United States of America             |
| (72) FACCHINI, Gianni                 | (32) 10.04.2015                    | United States of America                  |
| PAGANI, Luca                          | 25.09.2015                         | (47) 14.04.2021                           |
| MAZZOTTI, Matteo                      | (33) United States of America      | (51) B65C 1/04                            |
| RIZZOLI, Fabio Cesare                 | United States of America           | B65C 9/30                                 |
| (74) ir. M.F.J.M. Ketelaars c.s.      | (47) 02.06.2021                    | B65C 9/36                                 |
| (31) 201700113786                     | (51) B65B 11/02                    | (11) EP3549880                            |
| (32) 10.10.2017                       | B65B 11/04                         | (21) EP19162447.7                         |
| (33) Italy                            | B65B 11/06                         | (22) 13.03.2019                           |
| (47) 21.04.2021                       | B65B 57/04                         | (54) PRESSING DEVICE WITH MOTOR           |
| (51) B64F 1/315                       | (11) EP3521183                     | (73) MULTIVAC Marking & Inspection GmbH   |
| B66B 9/08                             | (21) EP19165168.6                  | & Co. KG                                  |
| (11) EP3587332                        | (22) 14.01.2015                    | (72) TAUTZ, Frank                         |
| (21) EP19181232.0                     | (54) DYNAMIC ADJUSTMENT OF WRAP    | DAUWE, Markus                             |
| (22) 19.06.2019                       | FORCE PARAMETER RESPONSIVE TO      | HENRICH, Udo                              |
| (54) A LIFT FOR TELESCOPIC            | MONITORED WRAP FORCE AND/OR        | REICHERT, Andreas                         |
| PASSENGER STAIRS FOR BOARDING         | FILM BREAK REDUCTION               | (74) ir. M.F.J.M. Ketelaars c.s.          |
| PASSENGERS IN WHEELCHAIRS ON A        | (73) Lantech.Com LLC               | (31) 102018204037                         |
| PLANE                                 | (72) LANCASTER, III, Patrick R.    | (32) 16.03.2018                           |
| (73) Tips d.o.o.                      | MITCHELL, Michael P.               | (33) Germany                              |
| (72) Ferlin, Janez                    | JOHNSON, Richard L.                | (47) 05.05.2021                           |
| Smole, Marjan                         | McCray, Jeremy D.                  | (51) B65D 1/22                            |
| Pustavrh, Robert                      | (74) ir. H.A. Witmans c.s.         | B65D 1/42                                 |
| Bratusa, Rok                          | (31) 201461927041 P                | (11) EP3333093                            |
| Sneberger, Silvo                      | (32) 14.01.2014                    | (21) EP17197907.3                         |
| (74) J. Hoekstra                      | (33) United States of America      | (22) 24.10.2017                           |
| (31) 201800143                        | (47) 19.05.2021                    | (54) PLASTIC CONTAINER                    |
| (32) 20.06.2018                       | (51) B65B 11/02                    | (73) BITO-Lagertechnik Bittmann GmbH      |
| (33) Slovenia                         | B65B 57/12                         | (72) PICK, Rolf                           |
| (47) 31.03.2021                       | B65B 57/16                         | (74) J.M.H. Duyver lic.                   |
| (51) B65B 3/26                        | (11) EP3353063                     | (31) 102016124041                         |
| B65B 57/00                            | (21) EP16849623.0                  | (32) 12.12.2016                           |
| B65B 57/20                            | (22) 22.09.2016                    | (33) Germany                              |
| (11) EP3160851                        | (54) STRETCH WRAPPING MACHINE WITH | (47) 05.05.2021                           |
| (21) EP15810983.5                     | AUTOMATED DETERMINATION OF         | (51) B65D 5/00                            |
| (22) 26.06.2015                       | LOAD STABILITY BY SUBJECTING A     | B65D 5/66                                 |
| (54) PROTECTIVE PACKAGING SYSTEM      | LOAD TO A DISTURBANCE              | (11) EP3642122                            |
| CONSUMABLE RESUPPLY SYSTEM            | (73) Lantech.Com LLC               | (21) EP18750306.5                         |
| (73) Pregis Intellipack LLC           | (72) LANCASTER, III, Patrick, R.   | (22) 14.06.2018                           |
| (72) WETSCH, Thomas D.                | MITCHELL, Michael, P.              | (54) CARDBOARD CRATE                      |
| BERTRAM, George                       | JOHNSON, Richard, L.               | (73) Maier, Gottfried                     |
| EISENBERGER, Edward                   | (74) ir. H.A. Witmans c.s.         | (72) Maier, Gottfried                     |
| (74) ir. M.F.J.M. Ketelaars c.s.      | (31) 201562232915 P                | (74) mr. ir. J. van Breda c.s.            |
| (31) 201462018267 P                   | (32) 25.09.2015                    | (31) 505152017                            |
| 201514749940                          | (33) United States of America      | (32) 22.06.2017                           |
| (32) 27.06.2014                       | (47) 07.04.2021                    | (33) Austria                              |
| 25.06.2015                            | (51) B65B 35/10                    | (47) 21.04.2021                           |
| (33) United States of America         | B65B 35/56                         | (51) B65D 5/42                            |
| United States of America              | B65B 57/00                         | B65D 51/24                                |
| (47) 05.05.2021                       | B65G 43/00                         | B65D 79/02                                |
| (51) B65B 11/00                       | B65G 47/08                         | B65D 85/73                                |
| B65B 11/02                            | B65G 47/84                         | (11) EP3554965                            |
| B65B 11/04                            | (11) EP3013695                     | (21) EP17811620.8                         |
| B65B 57/04                            | (21) EP14818304.9                  | (22) 14.12.2017                           |
| B65B 61/20                            | (22) 26.06.2014                    | (54) SMART PACKAGING FOR BEVERAGE         |
| B65D 71/00                            |                                    | (73) Anheuser-Busch InBev S.A.            |

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|------------------------------------------------|----------------------------------------------|------------------------------------------------|
| (72) THOMPSON, Keenan                          | (22) 05.03.2019                              | (47) 02.06.2021                                |
| (74) ir. H.A. Witmans c.s.                     | (54) HIGH-BAY WAREHOUSE FOR                  | (51) B66B 23/00                                |
| (31) 16204337                                  | STORING ITEMS IN STORAGE                     | B66B 25/00                                     |
| (32) 15.12.2016                                | LOCATIONS OF BAYS                            | (11) EP3585719                                 |
| (33) European Patent Office (EPO)              | (73) Knapp AG                                | (21) EP18705003.4                              |
| (47) 07.04.2021                                | (72) MATHI, Franz                            | (22) 20.02.2018                                |
| (51) B65D 17/50                                | PUNTIGAM, Wolfgang                           | (54) METHOD AND DEVICE FOR                     |
| B65D 47/28                                     | LERCHE, Robert                               | CREATING A 3D-MODEL OF AN                      |
| (11) EP3670373                                 | HUTTER, Johannes Alois                       | ESCALATOR OR A MOVING WALKWAY                  |
| (21) EP18212937.9                              | GINDL, Alfred                                | (73) Inventio AG                               |
| (22) 17.12.2018                                | RESCH, Alexander                             | (72) EDER, Christoph                           |
| (54) CLOSURE SYSTEM FOR DRINK CANS             | (74) ir. H.A. Witmans c.s.                   | SCHÜTZ, Richard                                |
| (73) RE-LID Engineering AG                     | (31) 502122018                               | NOVACEK, Thomas                                |
| (72) Bühler, Alois                             | (32) 12.03.2018                              | WAGENLEITNER, Georg                            |
| Schandl, Christian                             | (33) Austria                                 | (74) ir. M.F.J.M. Ketelaars c.s.               |
| (74) ir. A. Blokland c.s.                      | (47) 19.05.2021                              | (31) 17158053                                  |
| (47) 12.05.2021                                | (51) B65G 54/02                              | (32) 27.02.2017                                |
| (51) B65D 25/14                                | B33Y 10/00                                   | (33) European Patent Office (EPO)              |
| (11) EP3202681                                 | B33Y 30/00                                   | (47) 07.04.2021                                |
| (21) EP17161176.7                              | B29C 64/232                                  | (51) B66C 1/10                                 |
| (22) 23.07.2010                                | B29C 64/379                                  | F03D 13/10                                     |
| (54) METHOD OF MAKING A COATED                 | B29C 67/00                                   | F03D 80/00                                     |
| CONTAINER DEVICE                               | B33Y 40/00                                   | (11) EP3400385                                 |
| (73) Dow Global Technologies LLC               | (11) EP3134252                               | (21) EP17700064.3                              |
| (72) KAINZ, Bernhard                           | (21) EP15724382.5                            | (22) 04.01.2017                                |
| LUNDGARD, Richard                              | (22) 23.04.2015                              | (54) LIFTING DEVICE FOR LIFTING A              |
| MALOTKY, David                                 | (54) APPARATUS AND METHOD FOR                | COMPONENT OF A WIND TURBINE                    |
| MECCA, Jodi                                    | MAKING TANGIBLE PRODUCTS BY                  | AND METHOD FOR ASSEMBLING                      |
| DIEHL, Charles                                 | LAYERWISE MANUFACTURING                      | COMPONENTS OF A WIND TURBINE                   |
| DRUMRIGHT, Ray                                 | (73) Nederlandse Organisatie voor toegepast- | (73) Wobben Properties GmbH                    |
| (74) ir. J.D. de Zeeuw                         | natuurwetenschappelijk onderzoek TNO         | (72) MEYER, Wolfgang                           |
| (31) 228366 P                                  | (72) HOUBEN, René Jos                        | LÜLKER, Frank                                  |
| (32) 24.07.2009                                | BROUWERS, Leonardus Antonius Maria           | BEECKMANN, Sascha                              |
| (33) United States of America                  | BIEMANS, Augustinus Gerardus Maria           | (74) ir. H.A. Witmans c.s.                     |
| (47) 21.04.2021                                | RIJFERS, Andries                             | (31) 102016200160                              |
| (51) B65D 43/16                                | FEENSTRA, Frits Kornelis                     | (32) 08.01.2016                                |
| (11) EP3495286                                 | (74) ir. H.A. Witmans c.s.                   | (33) Germany                                   |
| (21) EP19154238.0                              | (31) 14165552                                | (47) 05.05.2021                                |
| (22) 15.12.2009                                | (32) 23.04.2014                              | (51) B66C 23/00                                |
| (54) CONTAINER WITH STACKING                   | (33) European Patent Office (EPO)            | B66C 23/68                                     |
| PROVISIONS                                     | (47) 07.04.2021                              | E04G 21/04                                     |
| (73) N.V. Nutricia                             | (51) B66B 1/32                               | (11) EP3649074                                 |
| (72) Dols, Merijn                              | B66B 5/02                                    | (21) EP18762409.3                              |
| Stevens, John Boyet                            | B66D 5/08                                    | (22) 29.06.2018                                |
| (74) ir. M.F.J.M. Ketelaars c.s.               | B66D 5/30                                    | (54) CRANE OR SIMILAR MANUPULATING             |
| (31) PCT/NL2008/050800                         | (11) EP3245150                               | APPARATUS WITH INTEGRATED                      |
| (32) 15.12.2008                                | (21) EP15877706.0                            | ASSEMBLY FOR OVERCOMING EACH                   |
| (33) World Intellectual Property Office (WIPO) | (22) 16.01.2015                              | DEAD POSITION BETWEEN PRIMARY                  |
| (47) 19.05.2021                                | (54) A RESCUE APPARATUS AND AN               | AND SECONDARY PART OF ITS                      |
| (51) B65D 85/804                               | ELEVATOR                                     | OPERATIONAL ARM                                |
| (11) EP3728076                                 | (73) KONE Corporation                        | (73) Tajfun Liv, Proizvodnja In Razvoj, d.o.o. |
| (21) EP18836531.6                              | (72) NAKARI, Arto                            | (72) GRIL, Branko                              |
| (22) 21.12.2018                                | KATTAINEN, Ari                               | SPAN, Iztok                                    |
| (54) BEVERAGE PREPARATION CAPSULE              | (74) ir. A.R. Aalbers                        | (74) ir. H.A. Witmans c.s.                     |
| (73) Gruppo Gimoka S.R.L.                      | (47) 14.04.2021                              | (31) 201700197                                 |
| (72) VALSECCHI, Massimiliano                   | (51) B66B 5/00                               | (32) 03.07.2017                                |
| (74) mr. ir. J. van Breda c.s.                 | (11) EP3527522                               | (33) Slovenia                                  |
| (31) 17209750                                  | (21) EP18156867.6                            | (47) 19.05.2021                                |
| 201800004732                                   | (22) 15.02.2018                              | (51) B67B 7/40                                 |
| (32) 21.12.2017                                | (54) A METHOD FOR PREVENTIVE                 | G01L 5/00                                      |
| 19.04.2018                                     | MAINTENANCE OF AN ELEVATOR                   | G01M 3/32                                      |
| (33) European Patent Office (EPO)              | AND AN ELEVATOR SYSTEM                       | (11) EP3606865                                 |
| Italy                                          | (73) KONE Corporation                        | (21) EP18713998.5                              |
| (47) 12.05.2021                                | (72) MUSTONEN, Matti                         | (22) 04.04.2018                                |
| (51) B65G 1/04                                 | AITAMURTO, Juha-Matti                        | (54) SYSTEM FOR OPENING A METAL                |
| (11) EP3609816                                 | JUSSILA, Ari                                 | CLOSURE UNDER A GAS PRESSURE                   |
| (21) EP19710582.8                              | LEPPÄKOSKI, Arttu                            | (73) Trivium Packaging Group Netherlands       |
|                                                | (74) ir. W.J.J.M. Kempes                     | B.V.                                           |

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|-----------------------------------|--------------------------------------|---------------------------------|
| (72) LEBOUCHER, Fabrice           | C10G 11/18                           | (74) ir. W.J.J.M. Kempes        |
| (74) J.M.H. Duyver lic.           | C10K 3/02                            | (47) 21.04.2021                 |
| (31) 1752994                      | C10L 1/04                            | (51) C01B 33/152                |
| (32) 06.04.2017                   | C12M 1/00                            | C01B 33/154                     |
| (33) France                       | C12M 1/04                            | C01B 33/157                     |
| (47) 28.04.2021                   | C12M 1/107                           | C04B 12/04                      |
| (51) B67D 1/07                    | C12P 5/02                            | C04B 28/26                      |
| E03C 1/04                         | C12P 7/04                            | C04B 111/00                     |
| E03C 1/044                        | C12P 7/06                            | C09K 17/12                      |
| E03C 1/10                         | C12P 7/08                            | C09K 17/46                      |
| F24D 17/00                        | C12P 7/18                            | E02D 3/12                       |
| (11) EP3366850                    | C12P 7/40                            | (11) EP3694954                  |
| (21) EP18155122.7                 | C12P 7/54                            | (21) EP18833029.4               |
| (22) 05.02.2018                   | C12R 1/01                            | (22) 19.12.2018                 |
| (54) HOUSEHOLD APPLIANCE FOR      | (11) EP2630245                       | (54) AQUEOUS COMPOSITION FOR    |
| DISPENSING LIQUID WITH A HOT      | (21) EP11835194.9                    | FORMING A GEL, USE THEREOF, AND |
| WATER SYSTEM AS DISINFECTION      | (22) 21.10.2011                      | METHOD FOR PRODUCING SAME       |
| DEVICE FOR A COOLED WATER         | (54) METHODS FOR THE PRODUCTION OF   | (73) Wöllner GmbH               |
| SYSTEM AND HOUSEHOLD              | HYDROCARBON PRODUCTS                 | (72) WEISS, Matthias            |
| APPLIANCE WITH COOLED WATER       | (73) Lanzatech New Zealand Limited   | LIND, Jörg                      |
| SYSTEM WITH A DISINFECTION        | (72) SCHULTZ, Michael                | HENSEL, Peter                   |
| DEVICE                            | OBERN, James                         | (74) ir. M.B. Plaggenborg       |
| (73) BSH Hausgeräte GmbH          | SIMPSON, Sean                        | (31) 102017130688               |
| (72) ENGLISH, Christian           | (74) ir. M.F.J.M. Ketelaars c.s.     | (32) 20.12.2017                 |
| SCHNEIDERBAUER, Gottfried         | (31) 201161439316 P                  | (33) Germany                    |
| (31) 102017203112                 | 58970010                             | (47) 31.03.2021                 |
| (32) 27.02.2017                   | 408236 P                             | (51) C02F 3/28                  |
| (33) Germany                      | 405854 P                             | C02F 11/04                      |
| (47) 19.05.2021                   | (32) 03.02.2011                      | C12M 1/107                      |
| (51) B67D 9/02                    | 03.12.2010                           | (11) EP3393984                  |
| (11) EP2611729                    | 29.10.2010                           | (21) EP16826129.5               |
| (21) EP11723713.1                 | 22.10.2010                           | (22) 21.12.2016                 |
| (22) 17.05.2011                   | (33) United States of America        | (54) FACILITY AND METHOD FOR    |
| (54) BALANCED LOADING ARM WITHOUT | New Zealand                          | BIOLOGICALLY TREATING ORGANIC   |
| A BASE FOR TRANSFERRING A FLUID   | United States of America             | WASTE AND EFFLUENTS             |
| PRODUCT                           | United States of America             | (73) Jua Group                  |
| (73) FMC Technologies SA          | (47) 26.05.2021                      | (72) SALLUSTRO, Jean-Luc        |
| (72) FUSY, Joël                   | (51) C01B 13/32                      | (74) dr. W.A.H.M. Van Borm      |
| (74) ir. F.A. Geurts c.s.         | C01F 7/02                            | (31) 1562898                    |
| (31) 1056948                      | C01G 23/053                          | (32) 21.12.2015                 |
| (32) 01.09.2010                   | C01G 25/02                           | (33) France                     |
| (33) France                       | (11) EP3409640                       | (47) 28.04.2021                 |
| (47) 21.04.2021                   | (21) EP17741479.4                    | (51) C03B 5/237                 |
| (51) B82Y 30/00                   | (22) 19.01.2017                      | C21B 9/02                       |
| B82Y 40/00                        | (54) METHOD FOR PRODUCING POROUS     | F27D 1/00                       |
| C08F 2/44                         | METAL OXIDE                          | F27D 1/04                       |
| C08K 3/34                         | (73) Fujimi Incorporated             | F27D 1/06                       |
| C08K 7/00                         | (72) TSUBOTA, Shogo                  | (11) EP3253718                  |
| C08K 9/04                         | HEPBURN, Robert                      | (21) EP16704537.6               |
| C09C 1/42                         | (74) ir. M.F.J.M. Ketelaars c.s.     | (22) 02.02.2016                 |
| C09C 1/44                         | (31) 201662281361 P                  | (54) INTEGRAL SELF-SUPPORTING   |
| C08K 3/013                        | 201662338756 P                       | REFRACTORY CHECKER BRICK        |
| (11) EP3240813                    | (32) 21.01.2016                      | MODULES FOR GLASS FURNACE       |
| (21) EP14909279.3                 | 19.05.2016                           | REGENERATOR STRUCTURES, AND     |
| (22) 29.12.2014                   | (33) United States of America        | METHODS OF FORMING SAME         |
| (54) PROCESS FOR TREATMENT OF     | United States of America             | (73) Fosbel, Inc.               |
| NANOPARTICLES OF MINERAL FILLER   | (47) 19.05.2021                      | (72) CAROLLA, Lou               |
| FOR USE IN POLYMERIZATION IN THE  | (51) C01B 33/107                     | SMITH, Michael, P.              |
| PRESENCE OF NANOPARTICLES         | C23C 16/00                           | BOWSER, Alan, E.                |
| (73) Braskem S.A.                 | (11) EP3653578                       | (74) ir. H.A. Witmans c.s.      |
| (72) POZZER, Dihogenes Adriano    | (21) EP18206150.7                    | (31) 201562111460 P             |
| MARTINS JUNIOR, Olavo             | (22) 14.11.2018                      | 201503141                       |
| COELHO SILVA LUCAS, Alessandra    | (54) TETRAKIS(TRICHLORSILYL) GERMAN, | (32) 03.02.2015                 |
| SILVEIRA, Fernando                | METHOD FOR PRODUCING SAME            | 25.02.2015                      |
| (74) ir. A. Blokland c.s.         | (73) Evonik Operations GmbH          | (33) United States of America   |
| (47) 31.03.2021                   | (72) WAGNER, Matthias                | United Kingdom                  |
| (51) C01B 3/38                    | TEICHMANN, Julian                    | (47) 21.04.2021                 |
| C10G 9/36                         | LERNER, Hans-Wolfram                 | (51) C03B 19/14                 |



|                                            |                                           |                                         |
|--------------------------------------------|-------------------------------------------|-----------------------------------------|
| C03B 37/014                                | (54) POLYMER DISPERSION AND METHOD        | (47) 07.04.2021                         |
| C03B 37/018                                | OF PRODUCING THE SAME                     | (51) C07D 231/12                        |
| C08G 77/26                                 | (73) Build Care Oy                        | C07D 401/12                             |
| (11) EP3484825                             | (72) KOPONEN, Vesa                        | C07D 401/14                             |
| (21) EP16741598.3                          | (74) dr. W.A.H.M. Van Borm                | C07D 403/12                             |
| (22) 18.07.2016                            | (31) 20175895                             | C07D 405/14                             |
| (54) METHOD FOR MANUFACTURING              | (32) 11.10.2017                           | C07D 413/14                             |
| SILICON DIOXIDE PREFORMS                   | (33) Finland                              | C07D 471/12                             |
| EMPLOYED IN THE PRODUCTION OF              | (47) 28.04.2021                           | C07D 487/04                             |
| OPTICAL FIBERS                             | (51) C05C 7/00                            | C07D 513/04                             |
| (73) Prysmian S.p.A.                       | C05F 7/00                                 | (11) EP3369732                          |
| (72) CARONNA, Valeria                      | C05F 11/08                                | (21) EP18163765.3                       |
| GRIECO, Stefano                            | C05G 5/12                                 | (22) 27.10.2010                         |
| SCHIAFFO, Antonio                          | (11) EP3319927                            | (54) ANDROGEN RECEPTOR                  |
| CARUSO, Tonino                             | (21) EP16744878.6                         | MODULATING COMPOUNDS                    |
| (74) ir. A. Blokland c.s.                  | (22) 11.05.2016                           | (73) ORION CORPORATION                  |
| (47) 07.04.2021                            | (54) SOIL IMPROVER COMPRISING SILT        | (72) WOHLFAHRT, Gerd                    |
| (51) C03C 25/64                            | WITH MYCORRHIZAE THEREIN,                 | TÖRMÄKANGAS, Olli                       |
| C03C 25/66                                 | AS WELL AS METHOD FOR THE                 | KARJALAINEN, Arja                       |
| (11) EP3168201                             | PRODUCTION OF THE SOIL                    | KNUUTTILA, Pia                          |
| (21) EP15897895.7                          | IMPROVER                                  | HOLM, Patrik                            |
| (22) 01.12.2015                            | (73) The Triple E Trust Holding B.V.      | RASKU, Sirpa                            |
| (54) INTENSITY ADJUSTABLE UV CURING        | (72) BADE, Tom                            | VESALAINEN, Anniina                     |
| EQUIPMENT FOR OPTICAL FIBER                | (74) ir. G.J.M. Verhees                   | SALO, Harri                             |
| COATING                                    | (31) 2014804                              | HÖGLUND, Lisa                           |
| (73) Yangtze Optical Fibre and Cable Joint | 2014902                                   | (74) ir. M.F.J.M. Ketelaars c.s.        |
| Stock Limited Company                      | (32) 13.05.2015                           | (31) 25515909 P                         |
| (72) YUE, Zheng                            | 01.06.2015                                | (32) 27.10.2009                         |
| LU, Songtao                                | (33) Netherlands                          | (33) United States of America           |
| HE, Qinguo                                 | Netherlands                               | (47) 26.05.2021                         |
| WANG, Ke                                   | (47) 31.03.2021                           | (51) C07D 309/10                        |
| (74) ir. M.F.J.M. Ketelaars c.s.           | (51) C07C 51/12                           | (11) EP3526229                          |
| (31) 201510462187                          | C07C 51/44                                | (21) EP17777935.2                       |
| (32) 31.07.2015                            | (11) EP3444235                            | (22) 09.10.2017                         |
| (33) China                                 | (21) EP18197891.7                         | (54) PROCESS FOR PREPARING              |
| (47) 07.04.2021                            | (22) 03.10.2011                           | GLUCOPYRANOSYL-SUBSTITUTED              |
| (51) C04B 7/26                             | (54) PRODUCTION OF ACETIC ACID WITH       | BENZYL-BENZENE DERIVATIVES              |
| (11) EP3247684                             | AN INCREASED PRODUCTION RATE              | (73) Boehringer Ingelheim International |
| (21) EP15708913.7                          | (73) Celanese International Corporation   | GmbH                                    |
| (22) 19.01.2015                            | (72) TORRENCE, G. Paull                   | (72) WIRTH, Thomas                      |
| (54) METHODS FOR MANUFACTURING             | ZINOBI, Raymond                           | BERG, Alexander                         |
| AMORPHOUS LOW-CALCIUM                      | TORRENCE, G. Paull                        | MEYNHARDT, Bernd                        |
| CONTENT SILICATE HYDRAULIC                 | (74) dr. W.A.H.M. Van Borm                | WEBER, Dirk                             |
| BINDERS                                    | (31) 90266110                             | (74) ir. F.A. Geurts c.s.               |
| (73) Cimpor Portugal, SGPS, SA             | (32) 12.10.2010                           | (31) 16193735                           |
| Instituto Superior Técnico                 | (33) United States of America             | (32) 13.10.2016                         |
| (72) HORTA, Ricardo Simões Bayão           | (47) 16.06.2021                           | (33) European Patent Office (EPO)       |
| COLAÇO, Rogério Anacleto Cordeiro          | (51) C07C 209/62                          | (47) 28.04.2021                         |
| LOPES, José Nuno Aguiar Canongia           | C07D 233/36                               | (51) C07D 493/08                        |
| SANTOS, Rodrigo Lino Dos                   | (11) EP3414223                            | (11) EP3515918                          |
| PEREIRA, João Chaves                       | (21) EP17703437.8                         | (21) EP17764559.5                       |
| SILVA, Paulo José Pires da Rocha E         | (22) 10.02.2017                           | (22) 07.09.2017                         |
| LEBREIRO, Sandra, Maria Martín             | (54) PROCESS TO CONVERT CYCLIC            | (54) PROCESS FOR PREPARING 2-           |
| (74) ir. M.F.J.M. Ketelaars c.s.           | ALKYLENE UREAS INTO THEIR                 | EXO-(2-METHYLBENZYLOXY)-1-              |
| (47) 28.04.2021                            | CORRESPONDING ALKYLENE                    | METHYL-4-ISOPROPYL-7-                   |
| (51) C04B 41/00                            | AMINES                                    | OXABICYCLO[2.2.1]HEPTANE                |
| C04B 41/48                                 | (73) Nouryon Chemicals International B.V. | (73) BASF Agro B.V.                     |
| C04B 41/63                                 | (72) EDVINSSON, Rolf Krister              | (72) BENSON, Stefan                     |
| C08K 3/22                                  | KANTZER, Eike Nicolas                     | RACK, Michael                           |
| C08K 3/36                                  | LARSSON, Per Fredrik Olmo                 | WOLF, Bernd                             |
| C08K 9/06                                  | LAKE, Karl Fredrik                        | GOETZ, Roland                           |
| C09D 5/02                                  | TEN KATE, Antoon Jacob Berend             | GEBHARDT, Joachim                       |
| C09D 133/08                                | SCHRÖDER, Ulf                             | KRAUS, Helmut                           |
| C09D 7/61                                  | MALMBERG, Johan Salman                    | (74) ir. W.J.J.M. Kempes                |
| (11) EP3532544                             | (74) dr. T. Wittop Koning PhD             | (31) 16189463                           |
| (21) EP18815266.4                          | (31) 16155546                             | (32) 19.09.2016                         |
| (22) 11.10.2018                            | (32) 12.02.2016                           | (33) European Patent Office (EPO)       |
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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) C07F 7/08<br>C08G 18/28<br>C08G 77/388                                                                                                                                                                                                                                                                                                                                                                                          | (74) dr. A. Krebs<br>(31) 12305697<br>(32) 19.06.2012<br>(33) European Patent Office (EPO)<br>(47) 28.04.2021                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | (31) 201261716605 P<br>(32) 21.10.2012<br>(33) United States of America<br>(47) 26.05.2021                                                                                                                                                                                                                                                                                                                                                                                                                                |
| (11) EP3645609<br>(21) EP18743173.9<br>(22) 26.06.2018                                                                                                                                                                                                                                                                                                                                                                               | (51) C07K 14/005<br>C07K 14/08<br>C12N 7/00<br>C12N 7/02<br>C12N 7/04<br>C12N 15/86<br>C12N 15/867<br>C12N 15/90                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | (51) C07K 16/00<br>(11) EP3625250<br>(21) EP18749716.9<br>(22) 20.07.2018<br>(54) SINGLE CHAIN VH AND HEAVY CHAIN ANTIBODIES<br>(73) Trianni, Inc.<br>(72) MUELLER, Werner<br>WABL, Matthias<br>(74) ir. J.D. de Zeeuw<br>(31) 17182507<br>(32) 21.07.2017<br>(33) European Patent Office (EPO)<br>(47) 14.04.2021                                                                                                                                                                                                        |
| (54) ISOCYANATE-FUNCTIONAL SILICONE-POLYETHER COPOLYMER, SILICONE-POLYETHER-URETHANE COPOLYMER FORMED THEREWITH, SEALANTS COMPRISING SAME, AND RELATED METHODS<br>(73) Dow Silicones Corporation<br>Dow Global Technologies LLC<br>(72) GRASMANN, Martin<br>HAGAN, David<br>HARKNESS, Brian<br>HEATH, William H.<br>HLINKA, Stephen Michael, II<br>JOFFRE, Eric<br>JOHNSON, William<br>KRISHNAN, Bindu<br>XU, Qiuyun<br>ZHU, Bizhong | (11) EP3455239<br>(21) EP17730841.8<br>(22) 12.05.2017<br>(54) PARTICLE FOR THE ENCAPSIDATION OF A GENOME ENGINEERING SYSTEM<br>(73) Flash Therapeutics<br>(72) BOUILLE, Pascale<br>GAYON, Régis<br>LAMOUROUX, Lucille<br>ICHE, Alexandra<br>(74) ir. F.A. Geurts c.s.<br>(31) 1654332<br>1660309<br>1752818<br>(32) 13.05.2016<br>24.10.2016<br>31.03.2017<br>(33) France<br>France<br>France<br>(47) 07.04.2021                                                                                                                                                                                                                                                                                                                                                                                    | (51) C07K 16/08<br>C07K 16/20<br>C07K 16/28<br>C07K 16/30<br>C07K 16/32<br>(11) EP3604333<br>(21) EP19195720.8<br>(22) 10.03.2015<br>(54) PROTEINS COMPRISING AMINO-TERMINAL PROXIMAL SHIGA TOXIN A SUBUNIT EFFECTOR REGIONS AND CELL-TARGETING IMMUNOGLOBULIN-TYPE BINDING REGIONS CAPABLE OF SPECIFICALLY BINDING CD38<br>(73) Molecular Templates, Inc.<br>(72) POMA, Eric<br>WILLERT, Erin<br>(74) ir. F.A. Geurts c.s.<br>(31) 201461951121 P<br>(32) 11.03.2014<br>(33) United States of America<br>(47) 05.05.2021 |
| (74) ir. J.D. de Zeeuw<br>(31) 201762524637 P<br>201762524636 P<br>201762524639 P<br>(32) 26.06.2017<br>26.06.2017<br>26.06.2017<br>(33) United States of America<br>United States of America<br>United States of America<br>(47) 21.04.2021                                                                                                                                                                                         | (51) C07H 1/00<br>C12P 19/34<br>C12Q 1/686<br>(11) EP2971123<br>(21) EP14763758.1<br>(22) 15.03.2014<br>(54) NUCLEIC ACID AMPLIFICATION<br>(73) Labrador Diagnostics LLC<br>(72) BELHOCINE, Kamila<br>LEE, Josephine<br>PATEL, Pranav<br>RICHARDSON, Aaron<br>TABAKMAN, Scott<br>(74) dr. W.A.H.M. Van Borm<br>(31) 201361800606 P<br>(32) 15.03.2013<br>(33) United States of America<br>(47) 05.05.2021                                                                                                                                                                                                                                                                                                                                                                                            | (51) C07K 16/18<br>C07K 16/28<br>C07K 16/30<br>G01N 33/569<br>C12N 5/0797<br>(11) EP3513191<br>(21) EP17771536.4<br>(22) 14.09.2017<br>(54) HUMAN OTIC PROGENITOR IDENTIFICATION AND ISOLATION<br>(73) The University Of Sheffield<br>(72) RIVOLTA, Carlos Marcelo Nicolas<br>BODDY, Sarah Louise<br>(74) dr. A. Krebs<br>(31) 201615714<br>(32) 15.09.2016<br>(33) United Kingdom<br>(47) 28.04.2021                                                                                                                     |
| (51) C07K 7/06<br>C07K 14/705<br>A61K 38/08<br>(11) EP2861241<br>(21) EP13729753.7<br>(22) 19.06.2013<br>(54) IMPROVED CD31 PEPTIDES<br>(73) Institut National de la Santé et de la Recherche Médicale (INSERM)<br>Université de Paris<br>ASSISTANCE PUBLIQUE - HÔPITAUX DE PARIS<br>UNIVERSITE PARIS 13 - PARIS NORD<br>(72) CALIGIURI, Giuseppina<br>NICOLETTI, Antonino                                                           | (51) C07K 14/315<br>(11) EP3303374<br>(21) EP16728359.7<br>(22) 03.06.2016<br>(54) METHODS AND PRODUCTS FOR FUSION PROTEIN SYNTHESIS<br>(73) Oxford University Innovation Limited<br>(72) HOWARTH, Mark<br>(74) J.M.H. Duyver lic.<br>(31) 201509782<br>(32) 05.06.2015<br>(33) United Kingdom<br>(47) 31.03.2021<br>(51) C07K 14/33<br>C12N 1/20<br>(11) EP2909307<br>(21) EP13786535.8<br>(22) 07.10.2013<br>(54) COMPOSITIONS AND METHODS RELATING TO A MUTANT CLOSTRIDIUM DIFFICILE TOXIN<br>(73) Pfizer Inc.<br>(72) JANSEN, Kathrin Ute<br>ANDERSON, Annaliesia Sybil<br>DONALD, Robert G.K.<br>FLINT, Michael James<br>KALYAN, Narender Kumar<br>LOTVIN, Jason Arnold<br>SIDHU, Maninder K<br>MORAN, Justin Keith<br>RUPPEN, Mark Edward<br>SUN, Weiqiang<br>(74) ir. M.F.J.M. Ketelaars c.s. | (51) C07K 19/00<br>C12N 9/22<br>C12N 15/63<br>C12N 15/113<br>(11) EP3353302<br>(21) EP16775603.0<br>(22) 23.09.2016<br>(54) ACTIVATION OF TASTE RECEPTOR GENES IN MAMMALIAN CELLS USING CRISPR-CAS-9                                                                                                                                                                                                                                                                                                                      |

|                                    |                                          |                                          |
|------------------------------------|------------------------------------------|------------------------------------------|
| (73) B.R.A.I.N. AG                 | (73) Dow Global Technologies LLC         | (73) Croda International PLC             |
| (72) PUL, Ümit                     | Rohm and Haas Company                    | (72) HONCOOP, Wilhelmus Adrianus Jacobus |
| KROHN, Michael                     | (72) ZHANG, Jiguang                      | SMITS, Angela Leonarda Maria             |
| (74) J.M.H. Duyver lic.            | CHEN, Jitao                              | (74) ir. W.J.J.M. Kempes                 |
| (31) 15187005                      | LU, Fujun                                | (31) 201418762                           |
| 15191360                           | LU, Wei                                  | (32) 22.10.2014                          |
| (32) 26.09.2015                    | FENG, Shaoguang                          | (33) United Kingdom                      |
| 24.10.2015                         | ROKOWSKI, Joseph M                       | (47) 14.04.2021                          |
| (33) European Patent Office (EPO)  | SUN, Tong                                | (51) C08G 69/40                          |
| European Patent Office (EPO)       | RAVISANKER, Loganathan                   | (11) EP3383937                           |
| (47) 31.03.2021                    | (74) ir. J.D. de Zeeuw                   | (21) EP16802211.9                        |
| (51) C08F 2/38                     | (47) 21.04.2021                          | (22) 11.11.2016                          |
| C08F 110/02                        | (51) C08G 18/08                          | (54) IMPROVED POLYMER PREPARATION        |
| (11) EP3626752                     | C08G 18/34                               | (73) INVISTA Textiles (U.K.) Limited     |
| (21) EP19202018.8                  | C08G 18/42                               | (72) LANGRICK, Charles Richard           |
| (22) 23.12.2014                    | C08G 18/66                               | HUNT, Garry S.                           |
| (54) ETHYLENE-BASED POLYMERS       | C08G 18/68                               | (74) J.M.H. Duyver lic.                  |
| FORMED USING ASYMMETRICAL          | C08G 18/75                               | (31) 201562261942 P                      |
| POLYENES                           | C08G 18/76                               | (32) 02.12.2015                          |
| (73) Dow Global Technologies LLC   | C08G 63/199                              | (33) United States of America            |
| (72) BERBEE, Otto J.               | C08G 63/553                              | (47) 09.06.2021                          |
| EDDY, Christopher R.               | C09D 175/06                              | (51) C08J 3/24                           |
| HINRICHS, Stefan                   | (11) EP3105271                           | (11) EP3257890                           |
| MUNJAL, Sarat                      | (21) EP15704833.1                        | (21) EP17175572.1                        |
| OSBY, John O.                      | (22) 05.02.2015                          | (22) 07.04.2011                          |
| (74) ir. J.D. de Zeeuw             | (54) POLYURETHANE DISPERSIONS            | (54) CROSSLINKABLE COMPOSITION           |
| (31) 201361920916 P                | (73) Croda International PLC             | (73) Allnex Netherlands B.V.             |
| (32) 26.12.2013                    | (72) HONCOOP, Wilhelmus Adrianus Jacobus | (72) BRINKHUIS, Richard Hendrikus Gerrit |
| (33) United States of America      | TRIET, Remco Benjamin Van                | SCHUTYSER, Jan Andre Jozef               |
| (47) 21.04.2021                    | SMITS, Angela Leonarda Maria             | DOLPHIJN, Paulus Jozef                   |
| (51) C08F 4/02                     | (74) ir. W.J.J.M. Kempes                 | BUSER, Antonius Johannes Wilhelmus       |
| C08F 4/651                         | (31) 201402585                           | ELFRINK, Petrus Johannes Maria David     |
| C08F 4/654                         | (32) 14.02.2014                          | GESSNER, Michael Anthony                 |
| C08F 4/655                         | (33) United Kingdom                      | SHALATI, Mohamad                         |
| C08F 110/02                        | (47) 26.05.2021                          | (74) drs. W.H.P. Derks                   |
| (11) EP3423501                     | (51) C08G 63/08                          | (31) 10159253                            |
| (21) EP17713502.7                  | C08K 3/34                                | (32) 07.04.2010                          |
| (22) 28.02.2017                    | C08K 5/06                                | (33) European Patent Office (EPO)        |
| (54) METHOD FOR IMPROVING ZIEGLER- | C08K 5/098                               | (47) 02.06.2021                          |
| NATTA CATALYST ACTIVITY            | C08L 67/04                               | (51) C08J 5/22                           |
| (73) Univation Technologies, LLC   | (11) EP3666826                           | C25B 1/46                                |
| (72) CANN, Kevin J.                | (21) EP18870964.6                        | C25B 9/08                                |
| AWE, Michael D.                    | (22) 26.06.2018                          | C25B 13/02                               |
| MARIOTT, Wesley R.                 | (54) POLYLACTIC ACID COMPOSITE           | C25B 13/08                               |
| (74) ir. J.D. de Zeeuw             | MATERIAL AND APPLICATION                 | C25B 11/04                               |
| (31) 201662301894 P                | THEREOF                                  | (11) EP3575443                           |
| (32) 01.03.2016                    | (73) Kingfa Sci. & Tech. Co., Ltd.       | (21) EP17894052.4                        |
| (33) United States of America      | (72) LU, Changli                         | (22) 24.11.2017                          |
| (47) 05.05.2021                    | YUAN, Zhimin                             | (54) ION EXCHANGE MEMBRANE AND           |
| (51) C08F 290/14                   | CAI, Tongmin                             | ELECTROLYSIS TANK                        |
| C08G 18/08                         | HUANG, Xianbo                            | (73) Asahi Kasei Kabushiki Kaisha        |
| C08G 18/10                         | ZENG, Xiangbin                           | (72) OHASHI, Ryuji                       |
| C08G 18/34                         | JIAO, Jian                               | KAMEYAMA, Hiroyuki                       |
| C08G 18/42                         | XIONG, Kai                               | MORIKAWA, Takuya                         |
| C08G 18/75                         | YANG, Hui                                | (74) J.M.H. Duyver lic.                  |
| C08G 18/83                         | MAI, Kaijin                              | (31) 2017013283                          |
| C08K 3/22                          | DONG, Xueting                            | (32) 27.01.2017                          |
| C08K 3/26                          | (74) dr. W.A.H.M. Van Borm               | (33) Japan                               |
| C08K 5/09                          | (31) 201711019796                        | (47) 09.06.2021                          |
| C09D 133/12                        | (32) 27.10.2017                          | (51) C08K 3/22                           |
| C09D 175/04                        | (33) China                               | C08K 5/00                                |
| C08K 3/00                          | (47) 09.06.2021                          | C08K 5/3492                              |
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| DISPERSIONS FOR ROOF COATINGS      | (22) 18.09.2015                          | (22) 03.07.2018                          |
| AND THEIR PREPARATION              | (54) POLYESTERS                          | (54) A POLYETHYLENE PIPE                 |

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| (73) BASF SE                               | (47) 16.06.2021                               | (47) 31.03.2021                       |
| (72) WEYLAND, Tania                        | (51) C08L 83/12                               | (51) C12M 1/02                        |
| BERTET, Marie Laure                        | G02B 1/04                                     | (11) EP3158051                        |
| HERBST, Heinz                              | G02C 7/04                                     | (21) EP15727041.4                     |
| (74) ir. W.J.J.M. Kempes                   | (11) EP2681614                                | (22) 21.05.2015                       |
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| (32) 06.07.2017                            | (22) 23.02.2012                               | FOR GROWING AND DISCHARGING A         |
| (33) European Patent Office (EPO)          | (54) WETTABLE SILICONE HYDROGEL               | BIOLOGICAL MATERIAL                   |
| (47) 14.04.2021                            | CONTACT LENSES                                | (73) NCH Corporation                  |
| (51) C08K 7/14                             | (73) CooperVision International Limited       | (72) CULPIN, David                    |
| C08K 9/04                                  | (72) HONG, Ye                                 | MOORE, Lawrence                       |
| C08L 25/12                                 | YAO, Li                                       | (74) ir. H.A. Witmans c.s.            |
| C08L 51/04                                 | LIU, Yuwen                                    | (31) 201410806                        |
| C08L 69/00                                 | CHEN, Charlie                                 | (32) 17.06.2014                       |
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| (54) GLASS FIBRE-REINFORCED                | (32) 28.02.2011                               | C12M 1/42                             |
| POLYCARBONATE MOLDING                      | (33) United States of America                 | C12M 3/06                             |
| MATERIALS WITH IMPROVED                    | (47) 05.05.2021                               | (11) EP3620508                        |
| TOUGHNESS                                  | (51) C09J 7/40                                | (21) EP19195328.0                     |
| (73) Covestro Intellectual Property GmbH & | B32B 7/06                                     | (22) 04.09.2019                       |
| Co. KG                                     | (11) EP3559139                                | (54) MICROFLUIDIC DEVICE FOR          |
| (72) SEIDEL, Andreas                       | (21) EP17835700.0                             | ELECTRICAL MEASUREMENT AND/OR         |
| PUPOVAC, Kristina                          | (22) 22.12.2017                               | STIMULATION                           |
| HOBEIKA, Sven                              | (54) ADHESIVE ASSEMBLY AND METHOD             | (73) BIOMIMX S.r.l.                   |
| (74) ir. W.J.J.M. Kempes                   | OF AFFIXING AN ADHESIVE                       | (72) RASPONI, Marco                   |
| (31) 15171172                              | (73) LINEAR SHAPED LIMITED                    | VISONE, Roberta                       |
| (32) 09.06.2015                            | (72) LUMLEY, Andrew                           | UGOLINI, Giovanni Stefano             |
| (33) European Patent Office (EPO)          | (74) dr. W.A.H.M. Van Borm                    | (74) ir. A. Blokland c.s.             |
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| C08L 23/12                                 | (47) 07.04.2021                               | (47) 28.04.2021                       |
| C08L 67/04                                 | (51) C10B 53/02                               | (51) C12M 1/34                        |
| C08L 77/02                                 | C10G 3/00                                     | (11) EP2785825                        |
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| (22) 27.10.2017                            | (21) EP19204384.2                             | (72) LEE, Philip, J.                  |
| (54) THERMOPLASTIC COMPOSITION FOR         | (22) 21.10.2019                               | GAIGE, Terry                          |
| 3D PRINTING                                | (54) METHOD FOR REFINING BIO-OIL              | HO, Wei Hsuan                         |
| (73) Henkel AG & Co. KGaA                  | FROM PYROLYSIS                                | (74) ir. H.A. Witmans c.s.            |
| (72) Marchese, Luca Mario                  | (73) Commissariat à l'énergie atomique et aux | (31) 201161566651 P                   |
| Spada, Fabio Angelo                        | énergies alternatives                         | (32) 03.12.2011                       |
| Uebele, Jörg                               | (72) GOUGET, Valentin                         | (33) United States of America         |
| (74) ir. M.F.J.M. Ketelaars c.s.           | ROUBAUD, Anne                                 | (47) 21.04.2021                       |
| (47) 05.05.2021                            | ROUSSELY, Julien                              | (51) C12N 1/00                        |
| (51) C08L 43/04                            | (74) ir. F.A. Geurts c.s.                     | (11) EP3181682                        |
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| C09J 143/04                                | (32) 23.10.2018                               | (22) 29.09.2009                       |
| C09J 201/10                                | (33) France                                   | (54) REDUCED COLONIZATION OF          |
| (11) EP3433331                             | (47) 28.04.2021                               | MICROBES AT THE MUCOSA                |
| (21) EP17712760.2                          | (51) C10G 21/16                               | (73) Intrexon Actobiotics NV          |
| (22) 21.03.2017                            | C10G 65/14                                    | (72) STEIDLER, Lothar                 |
| (54) METHOD FOR PRODUCING AN               | C10G 67/04                                    | (74) J.M.H. Duyver lic.               |
| ADHESIVE BASED ON A SILANE-                | (11) EP2737017                                | (31) 08105458                         |
| MODIFIED POLYMER AND ADHESIVE              | (21) EP12753274.5                             | (32) 29.09.2008                       |
| ARTICLE, SUCH AS AN ADHESIVE               | (22) 27.07.2012                               | (33) European Patent Office (EPO)     |
| STRIP OR A LABEL                           | (54) SELECTIVE TWO-STAGE                      | (47) 21.04.2021                       |
| (73) Coroplast Fritz Müller GmbH & Co. KG  | HYDROPROCESSING METHOD                        | (51) C12N 9/14                        |
| (72) RÖNISCH, Ralf                         | (73) Saudi Arabian Oil Company                | (11) EP3365438                        |
| BEITMANN, Marko                            | (72) KOSEOGLU, Omer, Refa                     | (21) EP16794111.1                     |
| (74) ir. A. Blokland c.s.                  | (74) dr. ir. G.J.C. Verdijk c.s.              | (22) 21.10.2016                       |
| (31) 102016105339                          | (31) 201161513233 P                           | (54) CODON-OPTIMIZED REDUCED-         |
| (32) 22.03.2016                            | (32) 29.07.2011                               | SIZE ATP7A CDNA AND USES              |
| (33) Germany                               | (33) United States of America                 |                                       |

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| FOR TREATMENT OF COPPER<br>TRANSPORT DISORDERS                                                                       | (21) EP14852274.1                         | DROZDOV, Ignat                      |
| (73) The United States of America, as<br>represented by The Secretary,<br>Department of Health and Human<br>Services | (22) 08.10.2014                           | (74) ir. W.J.J.M. Kempes            |
| (72) KALER, Stephen, G.                                                                                              | (54) METHOD FOR PRODUCING                 | (31) 201462050465 P                 |
| (74) ir. M.F.J.M. Ketelaars c.s.                                                                                     | MANNITOL BY USING INTESTINAL              | (32) 15.09.2014                     |
| (31) 201562244594 P                                                                                                  | BACTERIA FROM SLAUGHTERED                 | (33) United States of America       |
| (32) 21.10.2015                                                                                                      | ANIMALS                                   | (47) 21.04.2021                     |
| (33) United States of America                                                                                        | (73) Hakalehto, Eino Elias                | (51) C14C 1/02                      |
| (47) 28.04.2021                                                                                                      | (72) Hakalehto, Eino Elias                | C14C 1/04                           |
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| (11) EP3318574                                                                                                       | (51) C12Q 1/6806                          | (21) EP17761132.4                   |
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| (22) 23.06.2011                                                                                                      | (11) EP3262188                            | (54) USE OF OLIVE MILL WASTE WATERS |
| (54) POLYPEPTIDE HAVING BETA-<br>GLUCOSIDASE ACTIVITY AND USES<br>THEREOF                                            | (21) EP16710366.2                         | IN THE LEATHER TANNING INDUSTRY     |
| (73) DSM IP Assets B.V.                                                                                              | (22) 24.02.2016                           | (73) Tannow S.r.l.                  |
| (72) SCHOONEVELD-BERGMANS, Margot                                                                                    | (54) METHODS FOR TARGETED NUCLEIC         | (72) FRANCESCHI, Massimiliano       |
| Elisabeth Francoise                                                                                                  | ACID SEQUENCE COVERAGE                    | PACCHI, Giacomo                     |
| HEIJNE, Wilbert Herman Marie                                                                                         | (73) 10X Genomics, Inc.                   | MARAVIGLIA, Maurizio                |
| DE JONG, René Marcel                                                                                                 | (72) SCHNALL-LEVIN, Michael               | (74) J.M.H. Duyver lic.             |
| DAMVELD, Robbertus Antonius                                                                                          | JAROSZ, Mirna                             | (31) 201600081688                   |
| (74) ir. W.J.J.M. Kempes                                                                                             | (74) ir. M.F.J.M. Ketelaars c.s.          | (32) 03.08.2016                     |
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| (51) C12N 15/11                                                                                                      | (51) C12Q 1/6827                          | (21) EP18705651.0                   |
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| (21) EP19177392.8                                                                                                    | (21) EP14771159.2                         | METALLURGICAL FURNACE               |
| (22) 22.07.2016                                                                                                      | (22) 15.03.2014                           | (73) Paul Wurth S.A.                |
| (54) USE OF A COMBINATION OF DBAIT<br>MOLECULE AND PARP INHIBITORS<br>TO TREAT CANCER                                | (54) METHOD OF DETECTING CANCER           | (72) LY, Giang Kien                 |
| (73) Institut Curie                                                                                                  | (73) Guardant Health, Inc.                | MAGGIOLI, Nicolas                   |
| Centre National de la Recherche<br>Scientifique                                                                      | (72) TALASAZ, AmirAli                     | (74) ir. H.A. Witmans c.s.          |
| ONXEO                                                                                                                | ELTOUKHY, Helmy                           | (31) 100107                         |
| INSERM (Institut National de la Santé et<br>de la Recherche Médicale)                                                | MORTIMER, Stefanie Ann Ward               | (32) 22.02.2017                     |
| Université Paris-Saclay                                                                                              | (74) ir. M.F.J.M. Ketelaars c.s.          | (33) Luxembourg                     |
| (72) DUTREIX, Marie                                                                                                  | (31) 201361793997 P                       | (47) 21.04.2021                     |
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| C12P 7/40                                                                                                            | United States of America                  | (21) EP19178184.8                   |
| C12P 7/52                                                                                                            | United States of America                  | (22) 04.06.2019                     |
| C12P 7/56                                                                                                            | World Intellectual Property Office (WIPO) | (54) A METHOD AND ARRANGEMENT       |
| C12P 19/24                                                                                                           | United States of America                  | FOR ESTIMATING A MATERIAL           |
| (11) EP3055418                                                                                                       | (47) 05.05.2021                           | PROPERTY OF AN OBJECT BY            |
|                                                                                                                      | (51) C12Q 1/6886                          | MEANS OF A LASER ULTRASONIC         |
|                                                                                                                      | (11) EP3194618                            | (LUS) MEASUREMENT EQUIPMENT         |
|                                                                                                                      | (21) EP15771837.0                         | (73) SSAB Technology AB             |
|                                                                                                                      | (22) 15.09.2015                           | (72) Malmström, Mikael              |
|                                                                                                                      | (54) COMPOSITIONS, METHODS                | (74) J.M.H. Duyver lic.             |
|                                                                                                                      | AND KITS FOR DIAGNOSIS OF A               | (47) 12.05.2021                     |
|                                                                                                                      | GASTROENTEROPANCREATIC                    | (51) C21D 8/02                      |
|                                                                                                                      | NEUROENDOCRINE NEOPLASM                   | C21D 9/46                           |
|                                                                                                                      | (73) Clifton Life Sciences LLC            | C22C 38/02                          |
|                                                                                                                      | (72) MODLIN, Irvin Mark                   | C22C 38/04                          |
|                                                                                                                      | KIDD, Mark                                |                                     |

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| (22) 20.12.2017                            | FLEXIBLE ORGANIC-INORGANIC            | D01H 7/86                              |
| (54) ULTRA-THICK STEEL MATERIAL            | LAMINATES                             | D02G 3/28                              |
| HAVING EXCELLENT SURFACE PART              | (73) BASF Coatings GmbH               | (11) EP3168339                         |
| NRL-DWT PROPERTIES AND METHOD              | (72) AHLF, Maraike                    | (21) EP16196199.0                      |
| FOR MANUFACTURING SAME                     | EICKEMEYER, Felix                     | (22) 28.10.2016                        |
| (73) POSCO                                 | LÖFFLER, Daniel                       | (54) METHOD FOR OPERATING A SPINDLE    |
| (72) LEE, Hak-Cheol                        | KLOTZ, Stephan                        | OF A TWO WIRE TWISTER OR               |
| JANG, Sung-Ho                              | FRANK, Jürgen                         | CABLING MACHINE                        |
| (74) ir. M.F.J.M. Ketelaars c.s.           | SUNG, Myung Mo                        | (73) Saurer Technologies GmbH & Co. KG |
| (31) 20160176553                           | YOON, Kwan Hyuck                      | (72) Raisich, Andrej                   |
| (32) 22.12.2016                            | (74) ir. W.J.J.M. Kempes              | Schnitzler, Jürgen                     |
| (33) Korea (Republic)                      | (31) 14172146                         | (74) drs. C.M.A. Quintelier            |
| (47) 07.04.2021                            | 15150318                              | (31) 102015014383                      |
| (51) C22C 13/00                            | (32) 12.06.2014                       | (32) 09.11.2015                        |
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| C25C 7/04                                  | (33) European Patent Office (EPO)     | (47) 19.05.2021                        |
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| (21) EP17763080.3                          | (51) C30B 25/02                       | D03D 1/00                              |
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| (54) HIGH-PURITY TIN AND METHOD FOR        | G02B 1/02                             | D03D 3/08                              |
| PRODUCING SAME                             | G02B 5/18                             | D03D 13/00                             |
| (73) JX Nippon Mining & Metals Corporation | (11) EP2965130                        | D03D 25/00                             |
| (72) IMORI, Toru                           | (21) EP14708020.4                     | D03D 41/00                             |
| TAKEMOTO, Koichi                           | (22) 04.03.2014                       | D03D 15/00                             |
| (74) ir. M.F.J.M. Ketelaars c.s.           | (54) SYNTHETIC DIAMOND OPTICAL        | (11) EP3041979                         |
| (31) 2016046060                            | ELEMENTS                              | (21) EP13756183.3                      |
| (32) 09.03.2016                            | (73) Element Six Technologies Limited | (22) 04.09.2013                        |
| (33) Japan                                 | (72) TWITCHEN, Daniel                 | (54) METHOD AND MEANS FOR WEAVING      |
| (47) 05.05.2021                            | BENNETT, Andrew Michael               | A 3D FABRIC, 3D FABRIC ITEMS           |
| (51) C23C 2/00                             | ANOIKIN, Yevgeny Vasilievich          | THEREOF AND THEIR USE                  |
| F27B 14/14                                 | DE WIT, Hendrikus Gerardus Maria      | (73) Bitem AB                          |
| F27D 21/00                                 | (74) ir. F.A. Geurts c.s.             | (72) KHOKAR, Nandan                    |
| F27D 99/00                                 | (31) 201361773658 P                   | (74) ir. M.F.J.M. Ketelaars c.s.       |
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| (54) ZINC COATING FURNACE                  | (33) United States of America         | (21) EP19205307.2                      |
| (73) Kopf Holding GmbH                     | United Kingdom                        | (22) 25.10.2019                        |
| (72) Kopf, Willi                           | (47) 28.04.2021                       | (54) SCRIM-REINFORCED CUSHION MAT      |
| Köhler, Karsten                            | (51) D01D 1/02                        | FOR CARPET TILES                       |
| (74) ir. M.F.J.M. Ketelaars c.s.           | D01D 5/04                             | (73) Johns Manville                    |
| (31) 102016110170                          | D01D 5/088                            | (72) HIMSTEDT, Heath H.                |
| (32) 02.06.2016                            | D01F 6/04                             | NANDI, Souvik                          |
| (33) Germany                               | D04C 1/02                             | HORN, Katelyn Grace                    |
| (47) 31.03.2021                            | (11) EP3124656                        | SHARPE, Philip Christopher             |
| (51) C23C 16/455                           | (21) EP15769764.0                     | (74) ir. F.A. Geurts c.s.              |
| C23C 16/54                                 | (22) 13.03.2015                       | (31) 201816179269                      |
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| (21) EP15721225.9                          | (73) Toyobo Co., Ltd.                 | (33) United States of America          |
| (22) 07.05.2015                            | (72) FUKUSHIMA, Yasunori              | (47) 21.04.2021                        |
| (54) PROCESS FOR PRODUCING                 | SHIRAKO, Masayuki                     | (51) E02B 17/02                        |
| ORGANIC-INORGANIC LAMINATES                | NISHIMURA, Hirokazu                   | E04H 12/08                             |
| (73) BASF Coatings GmbH                    | (74) ir. M.F.J.M. Ketelaars c.s.      | E04H 12/34                             |
| (72) AHLF, Maraike                         | (31) 2014068775                       | F16B 7/02                              |
| EICKEMEYER, Felix                          | 2014068777                            | F03D 13/25                             |
| KLOTZ, Stephan                             | 2014118489                            | (11) EP3561201                         |
| (74) ir. W.J.J.M. Kempes                   | 2014118491                            | (21) EP19171443.5                      |
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|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) ASSEMBLY CONSTRUCTION;<br>METHOD FOR MANUFACTURING A<br>CONSTRUCTION             | (47) 14.04.2021                                                                            | (51) E04C 3/36                                                                                                                                                                       |
| (73) KCI the engineers B.V.                                                           | (51) E04B 1/68                                                                             | E04H 12/00                                                                                                                                                                           |
| (72) VAN GELDER, Klaas Boudewijn                                                      | E04F 13/06                                                                                 | E04H 12/08                                                                                                                                                                           |
| (74) ir. H.A. Witmans c.s.                                                            | E04F 15/02                                                                                 | F21V 21/10                                                                                                                                                                           |
| (31) 1042844                                                                          | (11) EP3399119                                                                             | (11) EP3542014                                                                                                                                                                       |
| (32) 26.04.2018                                                                       | (21) EP18170588.0                                                                          | (21) EP17913186.7                                                                                                                                                                    |
| (33) Netherlands                                                                      | (22) 03.05.2018                                                                            | (22) 31.08.2017                                                                                                                                                                      |
| (47) 21.04.2021                                                                       | (54) DEVICE FOR CLADDING AN<br>EXTENSION JOINT BETWEEN FLOOR<br>SECTIONS CLAD WITH LININGS | (54) POLE FOR SUPPORTING LIGHTING<br>FIXTURES AND OTHER DEVICES                                                                                                                      |
| (51) E02D 5/04                                                                        | (73) Prossegger, Walfred                                                                   | (73) Technolite (Singapore) Pte Ltd                                                                                                                                                  |
| E02D 5/06                                                                             | (72) Prossegger, Walfred                                                                   | (72) CHIA, Ho Meng                                                                                                                                                                   |
| F24D 3/18                                                                             | (74) ir. A. Blokland c.s.                                                                  | (74) ir. H.A. Witmans c.s.                                                                                                                                                           |
| (11) EP3486378                                                                        | (31) 5008317 U                                                                             | (31) PCT/SG2017/050301                                                                                                                                                               |
| (21) EP18207544.0                                                                     | (32) 03.05.2017                                                                            | (32) 14.06.2017                                                                                                                                                                      |
| (22) 21.11.2018                                                                       | (33) Austria                                                                               | (33) World Intellectual Property Office (WIPO)                                                                                                                                       |
| (54) SHEET PILE WALL FOR HEAT<br>RECOVERY                                             | (47) 14.04.2021                                                                            | (47) 07.04.2021                                                                                                                                                                      |
| (73) SPS Energy                                                                       | (51) E04B 2/70                                                                             | (51) E04F 10/02                                                                                                                                                                      |
| (72) Schmitt, Peter                                                                   | E04B 2/74                                                                                  | E06B 9/24                                                                                                                                                                            |
| Semmling, Torsten                                                                     | E04B 2/80                                                                                  | E06B 9/262                                                                                                                                                                           |
| (74) J.M.H. Duyver lic.                                                               | E04C 3/36                                                                                  | (11) EP3390756                                                                                                                                                                       |
| (31) 202017006008 U                                                                   | (11) EP3601691                                                                             | (21) EP16813168.8                                                                                                                                                                    |
| (32) 21.11.2017                                                                       | (21) EP18712576.0                                                                          | (22) 16.12.2016                                                                                                                                                                      |
| (33) Germany                                                                          | (22) 20.03.2018                                                                            | (54) VARIABLE LENGTH SCREEN, SYSTEM<br>COMPRISING THE SAME AND<br>METHOD FOR MANUFACTURING                                                                                           |
| (47) 26.05.2021                                                                       | (54) A PARTITION WALL                                                                      | (73) Nederlandse Organisatie voor toegepast-<br>natuurwetenschappelijk onderzoek TNO                                                                                                 |
| (51) E02F 3/96                                                                        | (73) Rockwool International A/S                                                            | (72) AMMERLAAN, Johannes Andreas Maria<br>ANDRIESEN, Hieronymus Antonius<br>Josephus Maria<br>VAN HECK, Gerardus Titus<br>VAN DEN BRAND, Jeroen<br>SCHOO, Harmannus Franciscus Maria |
| (11) EP3359747                                                                        | (72) SØRENSEN, Jannie, Bakkær                                                              | (74) ir. H.A. Witmans c.s.                                                                                                                                                           |
| (21) EP16812882.5                                                                     | JAKOBSEN, Klavs, Koefoed                                                                   | (31) 15201384                                                                                                                                                                        |
| (22) 05.10.2016                                                                       | (74) dr. W.A.H.M. Van Borm                                                                 | (32) 18.12.2015                                                                                                                                                                      |
| (54) RECIPROCATING IMPACT HAMMER                                                      | (31) 17163028                                                                              | (33) European Patent Office (EPO)                                                                                                                                                    |
| (73) Robson, Angus                                                                    | (32) 27.03.2017                                                                            | (47) 02.06.2021                                                                                                                                                                      |
| (72) Robson, Angus                                                                    | (33) European Patent Office (EPO)                                                          | (51) E04F 21/00                                                                                                                                                                      |
| (74) ir. M.F.J.M. Ketelaars c.s.                                                      | (47) 02.06.2021                                                                            | (11) EP3533951                                                                                                                                                                       |
| (31) 15712986                                                                         | (51) E04B 5/02                                                                             | (21) EP19159729.3                                                                                                                                                                    |
| (32) 05.10.2015                                                                       | E04B 5/04                                                                                  | (22) 27.02.2019                                                                                                                                                                      |
| (33) New Zealand                                                                      | E04B 5/08                                                                                  | (54) A KNOB COUPLABLE TO A SPACER-<br>LEVELLER OF TILES FOR LAYING THE<br>TILES ON FLAT SURFACES                                                                                     |
| (47) 14.04.2021                                                                       | E04B 5/26                                                                                  | (73) Ghelfi S.r.l.                                                                                                                                                                   |
| (51) E03B 7/07                                                                        | (11) EP2907933                                                                             | (72) GHELFI, Stefano                                                                                                                                                                 |
| E03B 7/08                                                                             | (21) EP15155459.9                                                                          | (74) ir. W.J.J.M. Kempes                                                                                                                                                             |
| E03C 1/10                                                                             | (22) 17.02.2015                                                                            | (31) 201800003175                                                                                                                                                                    |
| E03C 1/122                                                                            | (54) PREFABRICATED FLOOR ELEMENT                                                           | (32) 01.03.2018                                                                                                                                                                      |
| F24D 19/10                                                                            | (73) IsoBouw Systems B.V.                                                                  | (33) Italy                                                                                                                                                                           |
| (11) EP3555381                                                                        | (72) Rensen, Petrus Frederikus Maria<br>Van Der Burgt, Petrus Henricus<br>Johannes         | (47) 31.03.2021                                                                                                                                                                      |
| (21) EP17832316.8                                                                     | (74) ir. A. Blokland c.s.                                                                  | (51) E04H 15/42                                                                                                                                                                      |
| (22) 14.12.2017                                                                       | (31) 2012280                                                                               | E04H 15/56                                                                                                                                                                           |
| (54) PLUMBING TUNDISH                                                                 | (32) 18.02.2014                                                                            | (11) EP3402947                                                                                                                                                                       |
| (73) McAlpine & Co Limited                                                            | (33) Netherlands                                                                           | (21) EP16885362.0                                                                                                                                                                    |
| (72) MCALPINE, James Edward                                                           | (47) 02.06.2021                                                                            | (22) 16.02.2016                                                                                                                                                                      |
| (74) J.M.H. Duyver lic.                                                               | (51) E04B 5/10                                                                             | (54) MODULAR TENT                                                                                                                                                                    |
| (31) 201621369                                                                        | E04C 3/04                                                                                  | (73) Kalvani IP Holdings, LLC.                                                                                                                                                       |
| (32) 15.12.2016                                                                       | E04C 3/07                                                                                  | (72) KALVANI, Bimal A.                                                                                                                                                               |
| (33) United Kingdom                                                                   | E04C 3/29                                                                                  | (74) ir. H.A. Witmans c.s.                                                                                                                                                           |
| (47) 16.06.2021                                                                       | (11) EP2959071                                                                             | (31) 201614992943                                                                                                                                                                    |
| (51) E03C 1/06                                                                        | (21) EP14754757.4                                                                          | (32) 11.01.2016                                                                                                                                                                      |
| (11) EP3517694                                                                        | (22) 20.02.2014                                                                            | (33) United States of America                                                                                                                                                        |
| (21) EP19152060.0                                                                     | (54) PREFABRICATED ROOF PLATE<br>ELEMENT AND METHOD FOR ITS<br>PRODUCTION                  | (47) 07.04.2021                                                                                                                                                                      |
| (22) 16.01.2019                                                                       | (73) SVENSSON, Peehr Mathias Ørnfeldt                                                      | (51) E05B 1/00                                                                                                                                                                       |
| (54) PULL-OUT HOSE GUIDANCE DEVICE<br>WITH GUIDE WEIGHT ROLLER AND<br>SANITARY SHOWER | (72) SVENSSON, Peehr Mathias Ørnfeldt                                                      | E05B 63/12                                                                                                                                                                           |
| (73) Hansgrohe SE                                                                     | (74) dr. ir. G.J.C. Verdijk c.s.                                                           | E05B 65/06                                                                                                                                                                           |
| (72) Melle, Fabian                                                                    | (31) 201370097                                                                             |                                                                                                                                                                                      |
| Schorer, Jürgen                                                                       | (32) 21.02.2013                                                                            |                                                                                                                                                                                      |
| (74) ir. F.A. Geurts c.s.                                                             | (33) Denmark                                                                               |                                                                                                                                                                                      |
| (31) 102018201078                                                                     | (47) 07.04.2021                                                                            |                                                                                                                                                                                      |
| (32) 24.01.2018                                                                       |                                                                                            |                                                                                                                                                                                      |
| (33) Germany                                                                          |                                                                                            |                                                                                                                                                                                      |

|                                     |                                      |                                    |
|-------------------------------------|--------------------------------------|------------------------------------|
| E05C 3/02                           | SWISZCZ, Paul G.                     | (74) ir. M.F.J.M. Ketelaars c.s.   |
| E05C 7/00                           | (74) ir. M.F.J.M. Ketelaars c.s.     | (31) 20141503                      |
| (11) EP3617434                      | (31) 201161476187 P                  | (32) 11.12.2014                    |
| (21) EP19189808.9                   | (32) 15.04.2011                      | (33) Norway                        |
| (22) 02.08.2019                     | (33) United States of America        | (47) 05.05.2021                    |
| (54) DOUBLE SWING DOOR WITH         | (47) 26.05.2021                      | (51) E21B 37/06                    |
| LOCKING DEVICE                      | (51) E21B 17/042                     | G01N 33/84                         |
| (73) Kermi GmbH                     | (11) EP3392543                       | (11) EP3417297                     |
| (72) Schmid, Markus                 | (21) EP16875267.3                    | (21) EP17712811.3                  |
| (74) ir. W.J.J.M. Kempes            | (22) 02.11.2016                      | (22) 17.02.2017                    |
| (31) 102018214389                   | (54) THREADED JOINT FOR STEEL PIPE   | (54) METHOD FOR TREATING A LIQUID  |
| (32) 27.08.2018                     | (73) Nippon Steel Corporation        | SAMPLE IN ORDER TO REMOVE          |
| (33) Germany                        | Vallourec Oil and Gas France         | INTERFERENCE BY IRON               |
| (47) 14.04.2021                     | (72) INOSE, Keita                    | (73) Kemira Oyj                    |
| (51) E05B 19/06                     | SUGINO, Masaaki                      | (72) HONKANEN, Tapio               |
| E05B 27/02                          | DOUCHI, Sadao                        | (74) ir. W.J.J.M. Kempes           |
| (11) EP3696351                      | (74) ir. M.F.J.M. Ketelaars c.s.     | (31) 20165133                      |
| (21) EP20154079.6                   | (31) 2015244620                      | (32) 19.02.2016                    |
| (22) 28.01.2020                     | (32) 15.12.2015                      | (33) Finland                       |
| (54) KEY FOR A CYLINDER LOCK        | (33) Japan                           | (47) 14.04.2021                    |
| (73) Aug. Winkhaus GmbH & Co. KG    | (47) 19.05.2021                      | (51) E21B 43/114                   |
| (72) Rasecke, Marc                  | (51) E21B 33/13                      | E21B 43/119                        |
| (74) ir. M.F.J.M. Ketelaars c.s.    | E21B 37/00                           | E21B 47/022                        |
| (31) 102019201994                   | E21B 43/32                           | E21B 47/0228                       |
| (32) 14.02.2019                     | (11) EP3042035                       | E21B 47/09                         |
| (33) Germany                        | (21) EP14842220.7                    | E21B 47/092                        |
| (47) 28.04.2021                     | (22) 26.08.2014                      | (11) EP3420185                     |
| (51) E05B 45/00                     | (54) METHOD FOR ISOLATION OF         | (21) EP17757233.6                  |
| E05B 67/00                          | A PERMEABLE ZONE IN A                | (22) 23.02.2017                    |
| E05B 71/00                          | SUBTERRANEAN WELL                    | (54) DIFFERENTIAL VELOCITY SENSOR  |
| (11) EP3581738                      | (73) Hydra Systems AS                | (73) Hunting Titan Inc.            |
| (21) EP19190099.2                   | (72) LARSEN, Arne Gunnar             | (72) MCBRIDE, Gene                 |
| (22) 07.03.2018                     | JENSEN, Roy Inge                     | (74) ir. A.R. Aalbers              |
| (54) ARTICULATED LOCK WITH ALARM    | ANDERSEN, Patrick                    | (31) 201662298782 P                |
| DEVICE                              | ENGELSGJERD, Erlend                  | (32) 23.02.2016                    |
| (73) ABUS August Bremicker Söhne KG | IUELL, Markus                        | (33) United States of America      |
| (74) ir. M.F.J.M. Ketelaars c.s.    | DAHL, Arnt Olav                      | (47) 14.04.2021                    |
| (31) 102017105031                   | ØSTVOLD, Arnold                      | (51) E21B 47/01                    |
| (32) 09.03.2017                     | MYHRE, Morten                        | (11) EP3417147                     |
| (33) Germany                        | (74) ir. A. Blokland c.s.            | (21) EP17704450.0                  |
| (47) 05.05.2021                     | (31) 20131213                        | (22) 09.02.2017                    |
| (51) E05B 47/00                     | (32) 06.09.2013                      | (54) AN ASSEMBLY OF AN INSTRUMENT  |
| E05B 65/10                          | (33) Norway                          | PANEL AND AN ANTI-FOULING          |
| E05C 7/04                           | (47) 09.06.2021                      | SYSTEM                             |
| (11) EP3628801                      | (51) E21B 34/10                      | (73) Koninklijke Philips N.V.      |
| (21) EP19197291.8                   | (11) EP3617440                       | (72) VAN DELDEN, Martinus Hermanus |
| (22) 13.09.2019                     | (21) EP19199346.8                    | Wilhelmus Maria                    |
| (54) LOCK DEVICE FOR A DOOR AND A   | (22) 19.08.2016                      | PAULUSSEN, Elvira Johanna Maria    |
| METHOD FOR OPENING A DOOR           | (54) PRESSURE OPERATED APPARATUS     | HIETBRINK, Roelant Boudewijn       |
| (73) Beyer & Müller GmbH & Co. KG   | AND METHOD                           | (74) drs. O. Griebing              |
| (72) Hüttmann, Jürgen               | (73) Weatherford U.K. Limited        | (31) 16155682                      |
| Mika, Peter                         | (72) Reid, Stephen                   | (32) 15.02.2016                    |
| (74) ir. F.A. Geurts c.s.           | Jaffrey, Ian                         | (33) European Patent Office (EPO)  |
| (31) 102018124060                   | (74) ir. H.A. Witmans c.s.           | (47) 07.04.2021                    |
| (32) 28.09.2018                     | (31) 201514968                       | (51) F01L 9/02                     |
| (33) Germany                        | (32) 23.08.2015                      | F01L 9/04                          |
| (47) 21.04.2021                     | (33) United Kingdom                  | F02B 21/00                         |
| (51) E06B 9/262                     | (47) 31.03.2021                      | F02B 21/02                         |
| E06B 9/34                           | (51) E21B 34/10                      | F02B 33/44                         |
| E06B 9/36                           | E21B 43/12                           | F02M 23/00                         |
| (11) EP2696729                      | F16K 41/10                           | F02M 25/10                         |
| (21) EP12771164.6                   | (11) EP3230556                       | (11) EP3247893                     |
| (22) 13.04.2012                     | (21) EP15868150.2                    | (21) EP15876125.4                  |
| (54) COVERING FOR ARCHITECTURAL     | (22) 10.12.2015                      | (22) 28.12.2015                    |
| OPENING INCLUDING CELL              | (54) A BELLOWS VALVE AND AN          | (54) INTERNAL COMBUSTION ENGINE,   |
| STRUCTURES BIASED TO OPEN           | INJECTION VALVE                      | COMBUSTION SYSTEMS, AND            |
| (73) Hunter Douglas Inc.            | (73) Petroleum Technology Company AS | RELATED METHODS AND CONTROL        |
| (72) COLSON, Wendell B.             | (72) KLEPPA, Erling                  | METHODS AND SYSTEMS                |



|                                     |                                         |                                            |
|-------------------------------------|-----------------------------------------|--------------------------------------------|
| (73) Bunjes, Douglas David          | HANSEN, Lars Henrik                     | GRUBER, Sarah                              |
| (72) Bunjes, Douglas David          | HANSEN, Sidse Damgaard                  | NAGL, Christoph                            |
| (74) ir. J.C. Volmer c.s.           | BRINK, Frederik Ettrup                  | RASCH, Markus                              |
| (31) 201462097495 P                 | HEDEVANG, Arne                          | STEPHAN, Markus                            |
| 201462097506 P                      | LAURITSEN, Anders Nordberg              | WILLIG, Henning                            |
| (32) 29.12.2014                     | (74) ir. W.J.J.M. Kempes                | HIMMELSTEIN, Rene                          |
| 29.12.2014                          | (31) 16169367                           | (74) dr. W.A.H.M. Van Borm                 |
| (33) United States of America       | (32) 12.05.2016                         | (31) 18152933                              |
| United States of America            | (33) European Patent Office (EPO)       | (32) 23.01.2018                            |
| (47) 19.05.2021                     | (47) 21.04.2021                         | (33) European Patent Office (EPO)          |
| (51) F02D 41/24                     | (51) F03D 17/00                         | (47) 02.06.2021                            |
| (11) EP2823172                      | (11) EP3497326                          | (51) F04B 9/14                             |
| (21) EP13711212.4                   | (21) EP17752108.5                       | F04B 17/06                                 |
| (22) 06.03.2013                     | (22) 11.08.2017                         | F04B 53/16                                 |
| (54) METHOD AND APPARATUS FOR       | (54) DETERMINING A WIND TURBINE         | F04B 53/22                                 |
| CALIBRATING A THROTTLE              | TOWER INCLINATION ANGLE                 | F16J 13/12                                 |
| (73) Carrier Corporation            | (73) Siemens Gamesa Renewable Energy A/ | F16J 13/24                                 |
| (72) STOCKBRIDGE, Michael           | S                                       | F16L 55/115                                |
| (74) ir. M.F.J.M. Ketelaars c.s.    | (72) EGEDAL, Per                        | (11) EP3087300                             |
| (31) 201261608879 P                 | (74) ir. M.F.J.M. Ketelaars c.s.        | (21) EP14889257.3                          |
| (32) 09.03.2012                     | (31) 102016219498                       | (22) 22.12.2014                            |
| (33) United States of America       | (32) 07.10.2016                         | (54) SAFETY CLOSURES AND PUMPING           |
| (47) 28.04.2021                     | (33) Germany                            | SYSTEMS                                    |
| (51) F02G 1/053                     | (47) 28.04.2021                         | (73) Cabot Microelectronics Corporation    |
| F25B 9/14                           | (51) F03G 7/00                          | Krywitsky, Lee A.                          |
| F25B 30/02                          | (11) EP3299619                          | (72) CHISHOLM, Dean                        |
| (11) EP2836772                      | (21) EP16796176.2                       | KRYWITSKY, Lee A.                          |
| (21) EP13775689.6                   | (22) 22.03.2016                         | (74) ir. M.F.J.M. Ketelaars c.s.           |
| (22) 11.04.2013                     | (54) THERMOACOUSTIC POWER               | (31) 201361921285 P                        |
| (54) HEAT PUMP WITH                 | GENERATION SYSTEM                       | 201414577453                               |
| ELECTROMECHANICALLY-ACTUATED        | (73) CENTRAL MOTOR WHEEL CO., LTD.      | (32) 27.12.2013                            |
| DISPLACERS                          | (72) FUKAYA, Noriyuki                   | 19.12.2014                                 |
| (73) Thermolift Inc.                | (74) ir. H.A. Witmans c.s.              | (33) United States of America              |
| (72) HOFBAUER, Peter                | (31) 2015103521                         | United States of America                   |
| (74) ir. W.J.J.M. Kempes            | (32) 21.05.2015                         | (47) 05.05.2021                            |
| (31) 201261622547 P                 | (33) Japan                              | (51) F04C 18/16                            |
| 201261719844 P                      | (47) 28.04.2021                         | F04C 27/00                                 |
| (32) 11.04.2012                     | (51) F04B 5/02                          | F04C 29/04                                 |
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| (33) United States of America       | (11) EP3504431                          | (11) EP3577344                             |
| United States of America            | (21) EP17758305.1                       | (21) EP17822757.5                          |
| (47) 05.05.2021                     | (22) 22.08.2017                         | (22) 21.12.2017                            |
| (51) F03D 1/06                      | (54) INJECTION ASSEMBLY, INJECTION      | (54) PUMP COOLING SYSTEMS                  |
| F03D 80/00                          | PUMP, AND METHOD FOR SUPPLY OF          | (73) Edwards Limited                       |
| (11) EP3262297                      | ADDITIVE TO A FLUID IN A PIPE           | (72) NORTH, Michael Henry                  |
| (21) EP16754707.4                   | (73) Van Opdorp, Robertus, Martinus     | NORTH, Phillip                             |
| (22) 25.02.2016                     | Ten Kate, Willem                        | GRAY, Malcolm William                      |
| (54) STRUCTURE ADAPTED TO TRAVERSE  | (72) DE BOER, Martijn                   | TURNER, Neil                               |
| A FLUID ENVIRONMENT AND             | VAN OPDORP, Robertus Martinus           | (74) ir. F.A. Geurts c.s.                  |
| METHOD OF RETROFITTING              | TEN KATE, Willem                        | (31) 201701833                             |
| STRUCTURE ADAPTED TO TRAVERSE       | (74) ir. M.F.J.M. Ketelaars c.s.        | 201716236                                  |
| A FLUID ENVIRONMENT                 | (31) 1042015                            | (32) 03.02.2017                            |
| (73) BIOMERENOWABLES INC.           | (32) 23.08.2016                         | 05.10.2017                                 |
| (72) CHURCH, Ryan                   | (33) Netherlands                        | (33) United Kingdom                        |
| (74) dr. W.A.H.M. Van Borm          | (47) 26.05.2021                         | United Kingdom                             |
| (31) 201562120409 P                 | (51) F04B 9/133                         | (47) 14.04.2021                            |
| (32) 25.02.2015                     | F04B 39/12                              | (51) F15B 15/20                            |
| (33) United States of America       | F04B 41/06                              | (11) EP3610160                             |
| (47) 07.04.2021                     | F04B 53/16                              | (21) EP18713563.7                          |
| (51) F03D 7/02                      | (11) EP3728846                          | (22) 02.03.2018                            |
| F03D 17/00                          | (21) EP19700822.0                       | (54) DOUBLE-ACTING BYPASS VALVE FOR        |
| (11) EP3455494                      | (22) 23.01.2019                         | A WORKING CYLINDER AND MASTER-             |
| (21) EP17724748.3                   | (54) METHOD AND DEVICE FOR              | WORKING CYLINDER                           |
| (22) 11.05.2017                     | COMPACTING A WORKING                    | (73) Bümach Engineering International B.V. |
| (54) ESTIMATION OF YAW MISALIGNMENT | SUBSTANCE                               | (72) BUETER, Josef                         |
| FOR A WIND TURBINE                  | (73) Maximator GmbH                     | (74) ir. H.J.G. Lips c.s.                  |
| (73) Ørsted Wind Power A/S          | (72) ADLER, Robert                      | (31) 202017001547 U                        |
| (72) DE MARÉ, Martin                | FAHRTHOFER, Georg                       | (32) 23.03.2017                            |

|                                            |                                         |                                    |
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| (33) Germany                               | (51) F16L 17/04                         | F25J 1/00                          |
| (47) 12.05.2021                            | (11) EP3693646                          | F25J 1/02                          |
| (51) F16B 35/04                            | (21) EP20158673.2                       | (11) EP3114418                     |
| (11) EP3274600                             | (22) 07.09.2017                         | (21) EP15713210.1                  |
| (21) EP16713162.2                          | (54) COUPLING WITH CIRCUMFERENTIAL      | (22) 27.02.2015                    |
| (22) 02.03.2016                            | GROOVE SHAPE, PIPE ELEMENT AND          | (54) METHOD AND FACILITY FOR       |
| (54) MALE ANTI-FALSE THREAD                | COUPLING                                | TRANSPORTING AND LIQUEFYING        |
| FASTENER MEMBER                            | (73) Victaulic Company                  | GAS                                |
| (73) Mathread Inc.                         | (72) BRANDT, Justin P.                  | (73) ENGIE                         |
| (72) GARVER, Michael                       | CUVO, Anthony J.                        | (72) BENOIT, Laurent               |
| (74) ir. M.F.J.M. Ketelaars c.s.           | BANCROFT, Philip Wayne                  | TORRES-MANSILLA, Anna              |
| (31) 201514671804                          | (74) drs. A.A. Jilderda                 | DROUET, Emeline                    |
| (32) 27.03.2015                            | (31) 201762449765 P                     | (74) dr. W.A.H.M. Van Borm         |
| (33) United States of America              | (32) 24.01.2017                         | (31) 1451707                       |
| (47) 21.04.2021                            | (33) United States of America           | (32) 03.03.2014                    |
| (51) F16C 11/12                            | (47) 09.06.2021                         | (33) France                        |
| F16D 3/00                                  | (51) F16L 37/098                        | (47) 19.05.2021                    |
| F16D 3/56                                  | F16L 37/133                             | (51) F17D 5/02                     |
| (11) EP3649356                             | F16L 37/138                             | F17D 5/06                          |
| (21) EP18750315.6                          | (11) EP3589876                          | (11) EP3607238                     |
| (22) 04.07.2018                            | (21) EP18701699.3                       | (21) EP18717728.2                  |
| (54) ARTICULATION                          | (22) 18.01.2018                         | (22) 29.03.2018                    |
| (73) Physik Instrumente (PI) GmbH & Co. KG | (54) QUICK CONNECTOR                    | (54) SENSOR ARRANGEMENT,           |
| (72) HÜBNER, Reinhard                      | (73) Husqvarna AB                       | UNDERWATER VEHICLE AND             |
| (74) drs. C.M.A. Quintelier                | (72) RIEDE, Felix                       | METHOD FOR UNDERWATER              |
| (31) 102017115050                          | (74) M.L. Huisman                       | DETECTION OF A LEAK IN FLUID       |
| (32) 05.07.2017                            | (31) 102017001883                       | CARRYING BODY                      |
| (33) Germany                               | (32) 01.03.2017                         | (73) FNV IP B.V.                   |
| (47) 09.06.2021                            | (33) Germany                            | (72) KARABACAK, Devrez Mehmet      |
| (51) F16F 9/02                             | (47) 31.03.2021                         | FARN, Anthony Charles              |
| (11) EP3025069                             | (51) F17C 5/00                          | WALLEY, Darren Paul                |
| (21) EP14752551.3                          | F17C 5/06                               | PAARDEKAM, Erik                    |
| (22) 11.07.2014                            | F17C 7/00                               | (74) ir. M.F.J.M. Ketelaars c.s.   |
| (54) DEVICE FOR TRIGGERING A GAS           | F17C 13/02                              | (31) 2018637                       |
| SPRING                                     | (11) EP3271636                          | (32) 03.04.2017                    |
| (73) Wandschneider, Guido                  | (21) EP16712953.5                       | (33) Netherlands                   |
| (72) Wandschneider, Guido                  | (22) 24.02.2016                         | (47) 26.05.2021                    |
| (74) ir. M.F.J.M. Ketelaars c.s.           | (54) METHOD AND DEVICE FOR FILLING      | (51) F21S 10/02                    |
| (31) 202013006582 U                        | TANKS                                   | H01L 25/075                        |
| (32) 23.07.2013                            | (73) L'Air Liquide Société Anonyme pour | H01L 33/48                         |
| (33) Germany                               | l'Etude et l'Exploitation des Procédés  | H01L 33/50                         |
| (47) 07.04.2021                            | Georges Claude                          | F21S 2/00                          |
| (51) F16K 1/226                            | (72) ROBERGE, Guillaume                 | (11) EP3239592                     |
| F16K 1/228                                 | DE REALS, Guy                           | (21) EP15861575.7                  |
| (11) EP3642515                             | VERGHADE, Jean-Marie                    | (22) 18.11.2015                    |
| (21) EP18723760.7                          | (74) ir. W.J.J.M. Kempes                | (54) LIGHT EMITTING DEVICE AND     |
| (22) 30.04.2018                            | (31) 1552188                            | VEHICULAR LAMP COMPRISING          |
| (54) CENTRIC BUTTERFLY VALVE               | (32) 17.03.2015                         | SAME                               |
| (73) KSB S.A.S                             | (33) France                             | (73) Seoul Semiconductor Co., Ltd. |
| (72) ARNAL, Fabien                         | (47) 14.04.2021                         | (72) LEE, Yoon Seop                |
| (74) ir. J.C. Volmer c.s.                  | (51) F17C 6/00                          | KIM, Da Hye                        |
| (31) 1770655                               | (11) EP3650741                          | LEE, Sang Hong                     |
| (32) 20.06.2017                            | (21) EP19202157.4                       | PARK, Byoung Kyu                   |
| (33) France                                | (22) 09.10.2019                         | KIM, Dae Wook                      |
| (47) 07.04.2021                            | (54) METHOD AND DEVICE FOR STORAGE      | PARK, Jae Hyun                     |
| (51) F16K 11/076                           | AND SUPPLY OF LIQUEFIED                 | (74) M.L. Huisman                  |
| G05D 16/06                                 | HYDROGEN                                | (31) 20140161072                   |
| F24F 11/80                                 | (73) L'AIR LIQUIDE, SOCIETE ANONYME     | 20140161071                        |
| (11) EP3483692                             | POUR L'ETUDE ET L'EXPLOITATION          | (32) 18.11.2014                    |
| (21) EP17201515.8                          | DES PROCÉDES GEORGES CLAUDE             | 18.11.2014                         |
| (22) 14.11.2017                            | (72) Bernhardt, Jean-Marc               | (33) Korea (Republic)              |
| (54) A DIFFERENTIAL PRESSURE               | Lagoutte, Francois                      | Korea (Republic)                   |
| CONTROL VALVE                              | (74) ir. W.J.J.M. Kempes                | (47) 31.03.2021                    |
| (73) FRESE A/S                             | (31) 1860429                            | (51) F21V 5/04                     |
| (72) RASMUSSEN, Christian Bo               | (32) 12.11.2018                         | G02B 3/08                          |
| (74) ir. W.J.J.M. Kempes                   | (33) France                             | G02B 19/00                         |
| (47) 28.04.2021                            | (47) 14.04.2021                         | G02B 27/09                         |
|                                            | (51) F17C 9/04                          | (11) EP3356875                     |

|                                                                                                          |                                                                                                           |                                                                                                      |
|----------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| (21) EP16775118.9                                                                                        | (21) EP16727432.3                                                                                         | (54) METHOD FOR OBTAINING ENERGY FROM STEAM-CONTAINING VAPOR, AND DEVICE FOR CARRYING OUT THE METHOD |
| (22) 20.09.2016                                                                                          | (22) 31.05.2016                                                                                           | (73) Kuchenmeister GmbH                                                                              |
| (54) LED MODULE WITH OUTPUT LENS                                                                         | (54) METHANE GAS PRODUCTION DEVICE AND USAGE                                                              | (72) JANK, Rüdiger                                                                                   |
| (73) Signify Holding B.V.                                                                                | (73) E.T.I.A. - EVALUATION TECHNOLOGIQUE, INGENIERIE ET APPLICATIONS                                      | (74) J.M.H. Duyver lic.                                                                              |
| (72) GOMMANS, Hendrikus, Hubertus, Petrus                                                                | (72) LEPEZ, Olivier                                                                                       | (31) 102015220221                                                                                    |
| (31) 15187257                                                                                            | (72) SAJET, Philippe                                                                                      | (32) 16.10.2015                                                                                      |
| (32) 29.09.2015                                                                                          | (74) ir. H.A. Witmans c.s.                                                                                | (33) Germany                                                                                         |
| (33) European Patent Office (EPO)                                                                        | (31) 1555148                                                                                              | (47) 14.04.2021                                                                                      |
| (47) 14.04.2021                                                                                          | (32) 05.06.2015                                                                                           | (51) F24D 19/10                                                                                      |
| (51) F21V 23/04                                                                                          | (33) France                                                                                               | H03K 17/96                                                                                           |
| F21V 23/00                                                                                               | (47) 12.05.2021                                                                                           | H03K 17/968                                                                                          |
| F21V 29/503                                                                                              | (51) F23C 5/08                                                                                            | G06F 3/0362                                                                                          |
| (11) EP3627044                                                                                           | F23C 13/00                                                                                                | (11) EP3400511                                                                                       |
| (21) EP19197181.1                                                                                        | (11) EP3647658                                                                                            | (21) EP17701755.5                                                                                    |
| (22) 13.09.2019                                                                                          | (21) EP18020568.4                                                                                         | (22) 03.01.2017                                                                                      |
| (54) LIGHTING DEVICE                                                                                     | (22) 01.11.2018                                                                                           | (54) OPERATING ELEMENT AND APPLIANCE PROVIDED THEREWITH                                              |
| (73) Signify Holding B.V.                                                                                | (54) FURNACE FOR ENDOTHERMIC PROCESS AND PROCESS FOR OPERATING A FURNACE WITH IMPROVED BURNER ARRANGEMENT | (73) Intergas Heating Assets B.V.                                                                    |
| (72) TER WEEME, Berend, Jan, Willem                                                                      | (73) L'AIR LIQUIDE, SOCIÉTÉ ANONYME POUR L'ÉTUDE ET L'EXPLOITATION DES PROCÉDÉS GEORGES CLAUDE            | (72) COOL, Peter Jan                                                                                 |
| HONTELE, Bertrand, Johan, Edward                                                                         | (72) Tadiello, Jean-Philippe                                                                              | (74) dr. ir. G.J.C. Verdijk c.s.                                                                     |
| WOUTERS, Vincent                                                                                         | Tudorache, Diana                                                                                          | (31) 2016064                                                                                         |
| (31) 18195704                                                                                            | (74) ir. W.J.J.M. Kempes                                                                                  | (32) 07.01.2016                                                                                      |
| (32) 20.09.2018                                                                                          | (47) 14.04.2021                                                                                           | (33) Netherlands                                                                                     |
| (33) European Patent Office (EPO)                                                                        | (51) F23C 9/00                                                                                            | (47) 14.04.2021                                                                                      |
| (47) 02.06.2021                                                                                          | F23C 9/08                                                                                                 | (51) F24F 1/46                                                                                       |
| (51) F22B 9/10                                                                                           | F23D 17/00                                                                                                | F24F 5/00                                                                                            |
| F22B 37/14                                                                                               | F23L 15/04                                                                                                | F25B 25/00                                                                                           |
| F22B 37/34                                                                                               | (11) EP3129708                                                                                            | F25D 16/00                                                                                           |
| (11) EP3267100                                                                                           | (21) EP15710814.3                                                                                         | F25B 41/00                                                                                           |
| (21) EP16400027.5                                                                                        | (22) 20.03.2015                                                                                           | (11) EP2910864                                                                                       |
| (22) 08.07.2016                                                                                          | (54) BURNER                                                                                               | (21) EP15155733.7                                                                                    |
| (54) STEAM CREATION SYSTEM                                                                               | (73) Sofinter S.p.A.                                                                                      | (22) 19.02.2015                                                                                      |
| (73) L'AIR LIQUIDE, SOCIÉTÉ ANONYME POUR L'ÉTUDE ET L'EXPLOITATION DES PROCÉDÉS GEORGES CLAUDE           | (72) MORANDI, Lorenzo                                                                                     | (54) Water cooling unit for conditioning systems                                                     |
| (72) Coscia, Antonio                                                                                     | (74) J.M.H. Duyver lic.                                                                                   | (73) Vertiv S.R.L.                                                                                   |
| (74) ir. W.J.J.M. Kempes                                                                                 | (31) MI20140679                                                                                           | (72) Furlan, Giancarlo                                                                               |
| (47) 14.04.2021                                                                                          | (32) 10.04.2014                                                                                           | Dall'olio, Roberto                                                                                   |
| (51) F23B 60/02                                                                                          | (33) Italy                                                                                                | (74) ir. J.C. Volmer c.s.                                                                            |
| F23G 7/10                                                                                                | (47) 31.03.2021                                                                                           | (31) PD20140037                                                                                      |
| F23L 1/02                                                                                                | (51) F23G 1/00                                                                                            | (32) 21.02.2014                                                                                      |
| F23L 9/06                                                                                                | (11) EP3301359                                                                                            | (33) Italy                                                                                           |
| F23L 13/06                                                                                               | (21) EP17405017.9                                                                                         | (47) 21.04.2021                                                                                      |
| F23N 3/00                                                                                                | (22) 27.09.2017                                                                                           | (51) F24F 13/06                                                                                      |
| F23N 3/04                                                                                                | (54) CREMATION FURNACE WITH IMPROVED HEATING AND COMBUSTION AND METHOD                                    | (11) EP3343119                                                                                       |
| F23N 5/02                                                                                                | (73) BÜRGE-FISCHER AG                                                                                     | (21) EP17208679.5                                                                                    |
| F23N 5/24                                                                                                | (72) Schütz, Friedrich                                                                                    | (22) 19.12.2017                                                                                      |
| F24B 5/02                                                                                                | (74) dr. W.A.H.M. Van Borm                                                                                | (54) AIR DIFFUSER                                                                                    |
| (11) EP3674607                                                                                           | (31) 12742016                                                                                             | (73) Zambolin, Marco                                                                                 |
| (21) EP19200231.9                                                                                        | (32) 28.09.2016                                                                                           | (72) Zambolin, Marco                                                                                 |
| (22) 27.09.2019                                                                                          | (33) Switzerland                                                                                          | (74) ir. H.Th. van den Heuvel c.s.                                                                   |
| (54) MECHANISM FOR AIR INTAKE IN THE COMBUSTION CHAMBER OF A BURNER FOR SOLID FUEL WITH NATURAL DRAFTING | (47) 21.04.2021                                                                                           | (31) 201600127985                                                                                    |
| (73) NEW BODART & GONAY                                                                                  | (51) F24C 15/20                                                                                           | (32) 19.12.2016                                                                                      |
| (72) LEGRAND, Matthieu                                                                                   | F24C 15/32                                                                                                | (33) Italy                                                                                           |
| (74) ir. W.J.J.M. Kempes                                                                                 | F28D 21/00                                                                                                | (47) 28.04.2021                                                                                      |
| (31) 201805709                                                                                           | (11) EP3362741                                                                                            | (51) F25B 9/02                                                                                       |
| (32) 16.10.2018                                                                                          | (21) EP16791318.5                                                                                         | F25J 1/00                                                                                            |
| (33) Belgium                                                                                             | (22) 11.10.2016                                                                                           | F25J 1/02                                                                                            |
| (47) 14.04.2021                                                                                          |                                                                                                           | (11) EP2229567                                                                                       |
| (51) F23C 3/00                                                                                           |                                                                                                           | (21) EP08857460.3                                                                                    |
| F23C 99/00                                                                                               |                                                                                                           | (22) 05.12.2008                                                                                      |
| F23G 5/10                                                                                                |                                                                                                           | (54) METHOD FOR REGULATION OF COOLING CAPACITY OF A COOLING SYSTEM BASED ON A GAS EXPANSION PROCESS. |
| F23G 5/24                                                                                                |                                                                                                           |                                                                                                      |
| F23G 7/06                                                                                                |                                                                                                           |                                                                                                      |
| H05B 3/40                                                                                                |                                                                                                           |                                                                                                      |
| (11) EP3303923                                                                                           |                                                                                                           |                                                                                                      |

|                                                                                                                                    |                                                        |                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|-----------------------------------------------------------------------|
| (73) Aragon AS                                                                                                                     | F26B 21/10                                             | (54) ARMOUR PLATE AND METHOD FOR MANUFACTURING THE SAME               |
| (72) NILSEN, Inge L.                                                                                                               | (11) EP3491312                                         | (73) Craco GmbH                                                       |
| (74) ir. H.A. Witmans c.s.                                                                                                         | (21) EP17745331.3                                      | (72) SCHÖNENBERG, Erich                                               |
| (31) 20076291                                                                                                                      | (22) 28.07.2017                                        | (74) ir. M.F.J.M. Ketelaars c.s.                                      |
| (32) 06.12.2007                                                                                                                    | (54) CONTACT DRYER                                     | (31) 102017129818                                                     |
| (33) Norway                                                                                                                        | (73) floradry GmbH                                     | (32) 13.12.2017                                                       |
| (47) 02.06.2021                                                                                                                    | (72) SCHLEDERER, Dr. Swantje M.                        | (33) Germany                                                          |
| (51) F25B 25/02                                                                                                                    | STEER, Dr.-Ing. Thomas                                 | (47) 28.04.2021                                                       |
| (11) EP2984419                                                                                                                     | WERNER, Hans                                           | (51) F42B 1/02                                                        |
| (21) EP14720450.7                                                                                                                  | (74) ir. H.A. Witmans c.s.                             | F42B 3/02                                                             |
| (22) 01.04.2014                                                                                                                    | (31) 102016213956                                      | F42B 3/08                                                             |
| (54) COMBINED VAPOR ABSORPTION AND MECHANICAL COMPRESSION CYCLE DESIGN                                                             | (32) 28.07.2016                                        | F42D 3/00                                                             |
| (73) Carrier Corporation                                                                                                           | (33) Germany                                           | (11) EP3417232                                                        |
| (72) MA, Zidu                                                                                                                      | (47) 28.04.2021                                        | (21) EP17711732.2                                                     |
| (74) J.M.H. Duyver lic.                                                                                                            | (51) F26B 15/18                                        | (22) 17.02.2017                                                       |
| (31) 201361810865 P                                                                                                                | F26B 21/12                                             | (54) LINEAR SHAPED CHARGE SUPPORT STRUCTURE                           |
| (32) 11.04.2013                                                                                                                    | H01L 21/67                                             | (73) LINEAR SHAPED LIMITED                                            |
| (33) United States of America                                                                                                      | H01L 21/677                                            | (72) LUMLEY, Andrew                                                   |
| (47) 02.06.2021                                                                                                                    | H05K 3/22                                              | (74) dr. W.A.H.M. Van Borm                                            |
| (51) F25B 39/02                                                                                                                    | (11) EP3425315                                         | (31) 201602887                                                        |
| F28D 5/00                                                                                                                          | (21) EP18182020.0                                      | (32) 18.02.2016                                                       |
| F28D 9/00                                                                                                                          | (22) 05.07.2018                                        | (33) United Kingdom                                                   |
| F28F 3/00                                                                                                                          | (54) SYSTEMS AND METHODS FOR SOLVENT EXTRACTION        | (47) 07.04.2021                                                       |
| F28F 11/04                                                                                                                         | (73) Nordson Corporation                               | (51) G01B 7/28                                                        |
| F28F 19/00                                                                                                                         | (72) ORLA-JENSEN, Per                                  | G01B 9/02                                                             |
| (11) EP3011239                                                                                                                     | ETIENNE, Stephane                                      | G01B 11/00                                                            |
| (21) EP14812959.6                                                                                                                  | (74) ir. M.F.J.M. Ketelaars c.s.                       | G01B 11/24                                                            |
| (22) 19.06.2014                                                                                                                    | (31) 201762529144 P                                    | G02B 13/18                                                            |
| (54) REDUCTION OF SCALE BUILD-UP IN AN EVAPORATIVE COOLING APPARATUS                                                               | 201816017386                                           | G06F 7/00                                                             |
| (73) F.F. Seeley Nominees Pty Ltd.                                                                                                 | (32) 06.07.2017                                        | (11) EP2286179                                                        |
| (72) SLAYZAK, Steven                                                                                                               | 25.06.2018                                             | (21) EP09729531.5                                                     |
| FINLEY, Robert                                                                                                                     | (33) United States of America                          | (22) 08.04.2009                                                       |
| GILLAN, Leland                                                                                                                     | United States of America                               | (54) STITCHING OF NEAR-NULLED SUBAPERTURE MEASUREMENTS                |
| MANLEY, Benjamin                                                                                                                   | (47) 21.04.2021                                        | (73) QED Technologies International, Inc.                             |
| THOMPSON, David                                                                                                                    | (51) F28D 1/04                                         | (72) MURPHY, Paul                                                     |
| ZUBE, Daniel                                                                                                                       | F28D 1/053                                             | DEVRIES, Gary                                                         |
| (74) ir. H.Th. van den Heuvel c.s.                                                                                                 | (11) EP3074709                                         | BROPHY, Christopher                                                   |
| (31) 201361837161 P                                                                                                                | (21) EP14784394.0                                      | FORBES, Greg                                                          |
| (32) 19.06.2013                                                                                                                    | (22) 24.09.2014                                        | (74) ir. M.F.J.M. Ketelaars c.s.                                      |
| (33) United States of America                                                                                                      | (54) DUAL DUTY MICROCHANNEL HEAT EXCHANGER             | (31) 123333 P                                                         |
| (47) 12.05.2021                                                                                                                    | (73) Carrier Corporation                               | (32) 08.04.2008                                                       |
| (51) F25J 3/00                                                                                                                     | (72) TARAS, Michael F.                                 | (33) United States of America                                         |
| F25J 3/02                                                                                                                          | (74) ir. M.F.J.M. Ketelaars c.s.                       | (47) 19.05.2021                                                       |
| (11) EP2856050                                                                                                                     | (31) 201361908265 P                                    | (51) G01B 11/16                                                       |
| (21) EP13727260.5                                                                                                                  | (32) 25.11.2013                                        | G02B 6/44                                                             |
| (22) 06.05.2013                                                                                                                    | (33) United States of America                          | (11) EP3649496                                                        |
| (54) DEVICE AND METHOD FOR CRYOGENICALLY SEPARATING A MIXTURE OF CARBON MONOXIDE AND METHANE PLUS HYDROGEN AND OPTIONALLY NITROGEN | (47) 28.04.2021                                        | (21) EP18745767.6                                                     |
| (73) L'Air Liquide Société Anonyme pour l'Etude et l'Exploitation des Procédés Georges Claude                                      | (51) F28D 1/047                                        | (22) 03.07.2018                                                       |
| (72) MARTY, Pascal                                                                                                                 | F28D 7/08                                              | (54) SMART COATING DEVICE FOR STORAGE TANK MONITORING AND CALIBRATION |
| TALBOT, Jean-Jacques                                                                                                               | (11) EP3578911                                         | (73) Saudi Arabian Oil Company                                        |
| (74) ir. W.J.J.M. Kempes                                                                                                           | (21) EP19176648.4                                      | (72) BOVERO, Enrico                                                   |
| (31) 1255063                                                                                                                       | (22) 27.05.2019                                        | OUTA, Ali                                                             |
| (32) 31.05.2012                                                                                                                    | (54) PIPE HEAT EXCHANGER FOR A BAKING OVEN             | AL-TAIE, Ihsan M.                                                     |
| (33) France                                                                                                                        | (73) Werner & Pfleiderer Industrielle Backtechnik GmbH | (74) dr. W.A.H.M. Van Borm                                            |
| (47) 14.04.2021                                                                                                                    | (74) ir. J.C. Volmer c.s.                              | (31) 201715640853                                                     |
| (51) F26B 3/20                                                                                                                     | (31) 102018208952                                      | (32) 03.07.2017                                                       |
| F26B 3/22                                                                                                                          | (32) 06.06.2018                                        | (33) United States of America                                         |
| F26B 17/20                                                                                                                         | (33) Germany                                           | (47) 09.06.2021                                                       |
|                                                                                                                                    | (47) 07.04.2021                                        | (51) G01C 17/38                                                       |
|                                                                                                                                    | (51) F41H 5/02                                         | G01C 25/00                                                            |
|                                                                                                                                    | (11) EP3499173                                         | G01R 33/00                                                            |
|                                                                                                                                    | (21) EP18207464.1                                      | G01R 33/022                                                           |
|                                                                                                                                    | (22) 21.11.2018                                        | G01R 33/028                                                           |

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|--------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| G01C 19/56                                                                                 | ALTAN, Nicola                                                               | (73) TrueDyne Sensors AG                                                                                                                                    |
| (11) EP3218674                                                                             | (74) dr. A. Krebs                                                           | Endress+Hauser Flowtec AG                                                                                                                                   |
| (21) EP14906042.8                                                                          | (31) PCT/EP2017/057288                                                      | (72) REITH, Patrick                                                                                                                                         |
| (22) 11.11.2014                                                                            | (32) 28.03.2017                                                             | HUBER, Christof                                                                                                                                             |
| (54) EXTENDED KALMAN FILTER BASED AUTONOMOUS MAGNETOMETER CALIBRATION                      | (33) World Intellectual Property Office (WIPO)                              | FETH, Hagen                                                                                                                                                 |
| (73) Intel Corporation                                                                     | (47) 05.05.2021                                                             | (74) ir. W.J.J.M. Kempes                                                                                                                                    |
| (72) HAN, Ke                                                                               | (51) G01D 4/00                                                              | (31) 102015118346                                                                                                                                           |
| HAN, He                                                                                    | G01K 17/06                                                                  | (32) 27.10.2015                                                                                                                                             |
| WANG, Zhifeng                                                                              | G05B 15/02                                                                  | (33) Germany                                                                                                                                                |
| XU, Feng                                                                                   | H04L 9/32                                                                   | (47) 21.04.2021                                                                                                                                             |
| (74) ir. W.J.J.M. Kempes                                                                   | H04L 29/06                                                                  | (51) G01H 1/12                                                                                                                                              |
| (47) 23.06.2021                                                                            | H04L 29/08                                                                  | H02J 50/10                                                                                                                                                  |
| (51) G01C 21/20                                                                            | H04W 84/18                                                                  | H02K 11/20                                                                                                                                                  |
| G01C 21/34                                                                                 | G06Q 50/06                                                                  | (11) EP2817596                                                                                                                                              |
| G01C 21/36                                                                                 | H04L 12/701                                                                 | (21) EP13706955.5                                                                                                                                           |
| G08G 1/0968                                                                                | H04L 12/723                                                                 | (22) 22.02.2013                                                                                                                                             |
| (11) EP3441723                                                                             | H04W 12/06                                                                  | (54) SENSOR ASSEMBLY, DEVICE AND METHOD FOR DETERMINING VIBRATIONS OF A MEASUREMENT OBJECT, AND MEASUREMENT OBJECT HAVING AT LEAST ONE SUCH SENSOR ASSEMBLY |
| (21) EP18198595.3                                                                          | (11) EP3602976                                                              | (73) Micro-Sensys GmbH                                                                                                                                      |
| (22) 29.06.2008                                                                            | (21) EP17715076.0                                                           | (72) JURISCH, Reinhard                                                                                                                                      |
| (54) NAVIGATION SYSTEM AND METHOD FOR EXCHANGE MUTUAL LOCATION INFORMATION USING MESSENGER | (22) 28.03.2017                                                             | PEITSCH, Peter                                                                                                                                              |
| (73) Thinkware Systems Corporation                                                         | (54) SIGNAL COMMUNICATION SYSTEM                                            | (74) ir. W.J.J.M. Kempes                                                                                                                                    |
| (72) LEE, Hee Back                                                                         | (73) ISTA International GmbH                                                | (31) 102012202789                                                                                                                                           |
| (74) ir. H.A. Witmans c.s.                                                                 | (72) NIEDERFELD, Gerhard                                                    | (32) 23.02.2012                                                                                                                                             |
| (31) 20070141677                                                                           | ALTAN, Nicola                                                               | (33) Germany                                                                                                                                                |
| (32) 31.12.2007                                                                            | (74) dr. A. Krebs                                                           | (47) 14.04.2021                                                                                                                                             |
| (33) Korea (Republic)                                                                      | (47) 05.05.2021                                                             | (51) G01H 9/00                                                                                                                                              |
| (47) 21.04.2021                                                                            | (51) G01F 1/00                                                              | E21B 47/135                                                                                                                                                 |
| (51) G01C 21/28                                                                            | G01N 15/08                                                                  | (11) EP3321648                                                                                                                                              |
| G01C 21/32                                                                                 | G01N 21/25                                                                  | (21) EP17207250.6                                                                                                                                           |
| G01S 19/39                                                                                 | G01N 21/59                                                                  | (22) 17.06.2011                                                                                                                                             |
| (11) EP3320370                                                                             | G01N 21/84                                                                  | (54) FIBER OPTIC CABLE FOR DISTRIBUTED ACOUSTIC SENSING WITH INCREASED ACOUSTIC SENSITIVITY                                                                 |
| (21) EP16894227.4                                                                          | G01N 33/487                                                                 | (73) Weatherford Technology Holdings, LLC                                                                                                                   |
| (22) 19.12.2016                                                                            | G06T 7/62                                                                   | (72) TAVERNER, Domino                                                                                                                                       |
| (54) SYSTEMS AND METHODS FOR DETERMINING A PATH OF A MOVING DEVICE                         | (11) EP3350573                                                              | GRUNBECK, John J                                                                                                                                            |
| (73) BEIJING DIDI INFINITY TECHNOLOGY AND DEVELOPMENT CO., LTD.                            | (21) EP15903259.8                                                           | DUNPHY, James R                                                                                                                                             |
| (72) REN, Cong                                                                             | (22) 04.09.2015                                                             | DOWD, Edward M                                                                                                                                              |
| HU, Qidong                                                                                 | (54) SYSTEMS AND METHODS FOR SAMPLE VERIFICATION                            | KUCZMA, Andrew S                                                                                                                                            |
| LIU, Boyu                                                                                  | (73) Qualigen, Inc.                                                         | BOSTICK, III, Francis X                                                                                                                                     |
| (74) dr. A. Krebs                                                                          | (72) POIRIER, Michael                                                       | BAKER, Mark                                                                                                                                                 |
| (31) 201610142880                                                                          | MIDDLETON, John Stephen                                                     | LABELLA, David                                                                                                                                              |
| (32) 14.03.2016                                                                            | POIRIER, Suzanne Marie                                                      | (74) ir. H.A. Witmans c.s.                                                                                                                                  |
| (33) China                                                                                 | (74) ir. W.J.J.M. Kempes                                                    | (31) 355924 P                                                                                                                                               |
| (47) 05.05.2021                                                                            | (47) 16.06.2021                                                             | (32) 17.06.2010                                                                                                                                             |
| (51) G01D 4/00                                                                             | (51) G01F 1/66                                                              | (33) United States of America                                                                                                                               |
| G01K 17/06                                                                                 | G01N 29/032                                                                 | (47) 21.04.2021                                                                                                                                             |
| G05B 15/02                                                                                 | G01N 29/036                                                                 | (51) G01K 7/42                                                                                                                                              |
| G05B 19/418                                                                                | (11) EP3467491                                                              | G01K 7/02                                                                                                                                                   |
| H04L 9/32                                                                                  | (21) EP18198967.4                                                           | G01K 11/32                                                                                                                                                  |
| H04L 29/06                                                                                 | (22) 05.10.2018                                                             | (11) EP3601969                                                                                                                                              |
| H04L 29/08                                                                                 | (54) FLUID FLOW MEASURING DEVICE AND ASSOCIATED METHOD                      | (21) EP18709360.4                                                                                                                                           |
| H04W 84/18                                                                                 | (73) FT Technologies (UK) Ltd                                               | (22) 12.03.2018                                                                                                                                             |
| G06Q 50/06                                                                                 | (72) KINCEL, Michael                                                        | (54) METHOD AND DEVICE FOR DETERMINING A TEMPERATURE DISTRIBUTION IN A MOULD PLATE FOR A METAL-MAKING PROCESS                                               |
| H04L 12/701                                                                                | (74) ir. H.A. Witmans c.s.                                                  | (73) ABB Schweiz AG                                                                                                                                         |
| H04L 12/723                                                                                | (31) 201716277                                                              | (72) SEDÉN, Martin                                                                                                                                          |
| H04W 12/06                                                                                 | (32) 05.10.2017                                                             | (74) ir. W.J.J.M. Kempes                                                                                                                                    |
| (11) EP3602977                                                                             | (33) United Kingdom                                                         | (31) 17161984                                                                                                                                               |
| (21) EP18712627.1                                                                          | (47) 31.03.2021                                                             | (32) 21.03.2017                                                                                                                                             |
| (22) 28.03.2018                                                                            | (51) G01F 1/84                                                              |                                                                                                                                                             |
| (54) HEAT CONSUMPTION ESTIMATION                                                           | G01N 9/00                                                                   |                                                                                                                                                             |
| (73) ISTA International GmbH                                                               | G01N 11/16                                                                  |                                                                                                                                                             |
| (72) NIEDERFELD, Gerhard                                                                   | (11) EP3368867                                                              |                                                                                                                                                             |
|                                                                                            | (21) EP16763274.4                                                           |                                                                                                                                                             |
|                                                                                            | (22) 12.09.2016                                                             |                                                                                                                                                             |
|                                                                                            | (54) MEMS SENSOR FOR MEASURING AT LEAST ONE MEASUREMENT VARIABLE OF A FLUID |                                                                                                                                                             |

|                                           |                                             |                                           |
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| (33) European Patent Office (EPO)         | (73) IFP Energies nouvelles                 | (11) EP3707519                            |
| (47) 05.05.2021                           | (72) DELPOUX, Olivier                       | (21) EP18796952.2                         |
| (51) G01M 11/02                           | FROT, Didier                                | (22) 06.11.2018                           |
| G02C 13/00                                | SINQUIN, Anne                               | (54) CONTACT PROBE FOR A TESTING          |
| (11) EP3696527                            | SAGNARD, Corinne                            | HEAD FOR TESTING HIGH-                    |
| (21) EP20167158.3                         | (74) ir. W.J.J.M. Kempes                    | FREQUENCY DEVICES                         |
| (22) 17.08.2018                           | (31) 1662981                                | (73) Technoprobe S.p.A                    |
| (54) METHOD AND DEVICES FOR               | (32) 21.12.2016                             | (72) CRIPPA, Roberto                      |
| DETERMINING THE POSITION AND /            | (33) France                                 | MAGGIONI, Flavio                          |
| OR ORIENTATION OF A SPECTACLE             | (47) 14.04.2021                             | CALAON, Andrea                            |
| LENS ON A HOLDER                          | (51) G01N 30/88                             | (74) dr. A. Ellens c.s.                   |
| (73) Carl Zeiss Vision International GmbH | (11) EP3499227                              | (31) 201700128116                         |
| (72) HANßEN, Adalbert                     | (21) EP18212216.8                           | (32) 09.11.2017                           |
| ROTHE, Elmar                              | (22) 13.12.2018                             | (33) Italy                                |
| (74) ir. W.J.J.M. Kempes                  | (54) A METHOD OF CONTROLLING                | (47) 28.04.2021                           |
| (31) 102017118908                         | IMPURITIES FOR CLINDAMYCIN                  | (51) G01R 33/38                           |
| (32) 18.08.2017                           | HYDROCHLORIDE                               | G01R 33/3875                              |
| (33) Germany                              | (73) Zhaoke Pharmaceutical (Hefei) Company  | G01R 33/48                                |
| (47) 21.04.2021                           | Limited                                     | (11) EP2791694                            |
| (51) G01N 13/00                           | (72) Ni, Dongsheng                          | (21) EP12813621.5                         |
| G01N 15/08                                | Liu, Jing                                   | (22) 11.12.2012                           |
| G01N 33/20                                | Li, Gang                                    | (54) ACTIVE RESISTIVE SHIMMING FOR        |
| G01N 33/204                               | Dai, Xiangrong                              | MRI DEVICES                               |
| (11) EP3615913                            | Li, Xiaoyi                                  | (73) ViewRay Technologies, Inc.           |
| (21) EP18724398.5                         | (74) J.M.H. Duyver lic.                     | (72) SHVARTSMAN, Shmaryu, M.              |
| (22) 25.04.2018                           | (31) 201711336457                           | DEMPSEY, James, F.                        |
| (54) APPARATUS AND METHOD FOR THE         | (32) 14.12.2017                             | DEMEESTER, Gordon                         |
| NON-DESTRUCTIVE MEASUREMENT               | (33) China                                  | (74) dr. W.A.H.M. Van Borm                |
| OF HYDROGEN DIFFUSIVITY                   | (47) 07.04.2021                             | (31) 201113324850                         |
| (73) Saudi Arabian Oil Company            | (51) G01N 33/02                             | (32) 13.12.2011                           |
| (72) MOHAMED SHIBLY, Kaamil Ur, Rahman    | G01V 3/10                                   | (33) United States of America             |
| TRAIDIA, Abderrazak                       | G01V 13/00                                  | (47) 14.04.2021                           |
| ENEZI, Abdullah                           | (11) EP3287815                              | (51) G01R 33/389                          |
| (74) dr. W.A.H.M. Van Borm                | (21) EP17194641.1                           | G01R 33/565                               |
| (31) 201715530683                         | (22) 07.02.2013                             | G01R 33/58                                |
| (32) 28.04.2017                           | (54) METAL DETECTOR                         | (11) EP3295203                            |
| (33) United States of America             | (73) Illinois Tool Works Inc.               | (21) EP16722878.2                         |
| (47) 02.06.2021                           | (72) MOORE, John Colin                      | (22) 12.05.2016                           |
| (51) G01N 21/64                           | TAGG, Colin Michael                         | (54) A METHOD OF DETERMINING A            |
| G02B 21/00                                | (74) ir. W.J.J.M. Kempes                    | GRADIENT IMPULSE RESPONSE                 |
| G02B 21/06                                | (31) 201202324                              | FUNCTION DURING EXECUTION OF A            |
| G02B 21/16                                | 201218448                                   | MAGNETIC RESONANCE IMAGING OR             |
| G02B 21/36                                | (32) 10.02.2012                             | SPECTROSCOPY SEQUENCE                     |
| G02B 26/08                                | 15.10.2012                                  | (73) Eidgenössische Technische Hochschule |
| G02B 26/10                                | (33) United Kingdom                         | (ETH)                                     |
| G02B 26/12                                | United Kingdom                              | Universität Zürich                        |
| G02B 27/00                                | (47) 21.04.2021                             | (72) WILM, Bertram                        |
| G02F 1/01                                 | (51) G01N 33/574                            | BARMET, Christoph                         |
| (11) EP3249441                            | (11) EP3580567                              | PRÜSSMANN, Klaas P.                       |
| (21) EP16740022.5                         | (21) EP18703784.1                           | (74) ir. H.A. Witmans c.s.                |
| (22) 12.01.2016                           | (22) 08.02.2018                             | (31) 15167449                             |
| (54) IMAGE ACQUISITION DEVICE AND         | (54) IN VITRO METHOD FOR THE                | (32) 12.05.2015                           |
| IMAGE ACQUISITION METHOD                  | DIAGNOSIS OF LUNG CANCER                    | (33) European Patent Office (EPO)         |
| (73) Hamamatsu Photonics K.K.             | (73) Fundacion para la Investigacion Medica | (47) 14.04.2021                           |
| (72) MATSUMOTO, Naoya                     | Aplicada                                    | (51) G01S 3/04                            |
| (74) ir. H.A. Witmans c.s.                | Advanced Marker Discovery, S.L.             | H04N 5/225                                |
| (31) 2015008445                           | (72) AGORRETA ARRAZUBI, Jackeline           | H04R 5/02                                 |
| (32) 20.01.2015                           | AJONA MARTÍNEZ-POLO, Daniel                 | (11) EP3012650                            |
| (33) Japan                                | MONTUENGA BADIÁ, Luis                       | (21) EP13852346.9                         |
| (47) 19.05.2021                           | PAJARES VILLANDIEGO, María Josefa           | (22) 02.09.2013                           |
| (51) G01N 21/65                           | PÍO OSÉS, Rubén                             | (54) MOBILE ACOUSTIC SOURCE               |
| G01N 21/75                                | (74) dr. W.A.H.M. Van Borm                  | TRACKING SENSOR AND                       |
| G01N 21/84                                | (31) 17382054                               | MANUFACTURING METHOD                      |
| (11) EP3559641                            | (32) 08.02.2017                             | (73) SM Instruments Co., Ltd.             |
| (21) EP17808429.9                         | (33) European Patent Office (EPO)           | (72) KIM, Young Ki                        |
| (22) 30.11.2017                           | (47) 07.04.2021                             | (74) ir. J.C. Volmer c.s.                 |
| (54) SIMPLIFIED DEVICE FOR DETECTING      | (51) G01R 1/067                             | (31) 20130071285                          |
| THE FORMATION OF GAS HYDRATES             | G01R 1/073                                  | (32) 21.06.2013                           |

|                                                |                                      |                                   |
|------------------------------------------------|--------------------------------------|-----------------------------------|
| (33) Korea (Republic)                          | (33) Korea (Republic)                | (22) 16.04.2015                   |
| (47) 09.06.2021                                | (47) 05.05.2021                      | (54) GATEWAY OFFERING LOGICAL     |
| (51) G01V 5/00                                 | (51) G03F 7/20                       | MODEL MAPPED TO INDEPENDENT       |
| G01N 23/04                                     | (11) EP3608721                       | UNDERLYING NETWORKS               |
| G01N 23/22                                     | (21) EP19200344.0                    | (73) Honeywell International Inc. |
| (11) EP3224603                                 | (22) 15.12.2015                      | (72) STRILICH, James A.           |
| (21) EP15862380.1                              | (54) DIGITAL MASK PANEL FOR MAKING A | MCLAUGHLIN, Paul F.               |
| (22) 28.11.2015                                | FLEXOGRAPHIC PRINT MASTER            | MASSEY, W. Russell                |
| (54) DEVICE AND METHOD FOR MATERIAL            | (73) AGFA NV                         | STEINMAN, Jethro F.               |
| CHARACTERISATION                               | (72) VAN DORPE, Jurgen               | KRISHNAMURTHY,                    |
| (73) Southern Innovation International Pty Ltd | MEURIS, Werner                       | Ananthapadmanabha                 |
| (72) SCOLLAR, Paul                             | (47) 30.06.2021                      | (74) ir. W.J.J.M. Kempes          |
| MCLEAN, Christopher                            | (51) G04F 10/00                      | (31) 201414269903                 |
| TONISSEN, Shane                                | (11) EP3021176                       | (32) 05.05.2014                   |
| SALEEM, Syed Khusro                            | (21) EP15190054.5                    | (33) United States of America     |
| ALLMAN, Brendan                                | (22) 15.10.2015                      | (47) 02.06.2021                   |
| (74) ir. W.J.J.M. Kempes                       | (54) LOW POWER BIPOLAR 360 DEGREES   | (51) G05B 23/02                   |
| (31) 2014268284                                | TIME TO DIGITAL CONVERTER            | (11) EP3137957                    |
| (32) 30.11.2014                                | (73) Intel Deutschland GmbH          | (21) EP15786118.8                 |
| (33) Australia                                 | (72) SCHIMPER, Markus                | (22) 15.04.2015                   |
| (47) 28.04.2021                                | (74) ir. W.J.J.M. Kempes             | (54) APPARATUS AND METHOD FOR     |
| (51) G02B 3/00                                 | (31) 201414542802                    | PROVIDING A GENERALIZED           |
| G02B 27/00                                     | (32) 17.11.2014                      | CONTINUOUS PERFORMANCE            |
| G02B 27/01                                     | (33) United States of America        | INDICATOR                         |
| H04N 13/344                                    | (47) 16.06.2021                      | (73) Honeywell International Inc. |
| G02B 30/10                                     | (51) G05B 15/02                      | (72) NADUTHOTA, Rajeev            |
| (11) EP3633419                                 | G05D 23/19                           | JAIN, Rajni                       |
| (21) EP19201472.8                              | (11) EP3602229                       | SRINIVASAN, Ranganathan           |
| (22) 04.10.2019                                | (21) EP18703577.9                    | (74) ir. W.J.J.M. Kempes          |
| (54) HEAD-MOUNTED DISPLAY                      | (22) 05.02.2018                      | (31) 201414265066                 |
| (73) HTC Corporation                           | (54) METHOD AND DEVICE FOR           | (32) 29.04.2014                   |
| (72) DENG, Qi-Long                             | INTERNET-SUPPORTED                   | (33) United States of America     |
| (74) ir. M.F.J.M. Ketelaars c.s.               | OPTIMIZATION OF THE PARAMETERS       | (47) 02.06.2021                   |
| (31) 201862741552 P                            | OF HEATING CONTROL                   | (51) G05D 1/00                    |
| (32) 05.10.2018                                | (73) Viessmann Climate Solutions SE  | G08G 5/00                         |
| (33) United States of America                  | (72) STRUBEL, Jan                    | H04N 5/232                        |
| (47) 26.05.2021                                | ARNOLD, Christian                    | H04N 7/18                         |
| (51) G02B 6/44                                 | (74) ir. M.F.J.M. Ketelaars c.s.     | G05D 1/02                         |
| (11) EP3022595                                 | (31) 102017205033                    | (11) EP3314343                    |
| (21) EP14825675.3                              | (32) 24.03.2017                      | (21) EP16814960.7                 |
| (22) 15.07.2014                                | (33) Germany                         | (22) 25.05.2016                   |
| (54) POWER AND OPTICAL FIBER                   | (47) 05.05.2021                      | (54) PERSONAL SENSORY DRONES      |
| INTERFACE                                      | (51) G05B 15/02                      | (73) Intel Corporation            |
| (73) CommScope Technologies LLC                | H04L 12/28                           | (72) RAFFA, Giuseppe              |
| (72) HUEGERICH, Thomas P.                      | G06F 8/20                            | ANDERSON, Glen J.                 |
| KACHMAR, Wayne M.                              | (11) EP2764414                       | DURHAM, Lenitra M.                |
| FLAIG, Robert Charles                          | (21) EP12769085.7                    | BECKWITH, Richard                 |
| BRETZ, Dwight A.                               | (22) 28.09.2012                      | YUEN, Kathy                       |
| (74) ir. J.D. de Zeeuw                         | (54) SYSTEM AND METHOD FOR           | EKANDEM, Joshua                   |
| (31) 201361846392 P                            | AUTOMATICALLY NAMING OBJECTS         | SHERMAN, Jamie                    |
| (32) 15.07.2013                                | IN A BUILDING AUTOMATION SYSTEM      | MOSHKOVITZ, Ariel                 |
| (33) United States of America                  | (73) Siemens Schweiz AG              | BEN-SHALOM, Omer                  |
| (47) 21.04.2021                                | (72) BRUN, Gerhard                   | HEALEY, Jennifer                  |
| (51) G02B 27/64                                | MEIER, Herbert                       | BROWN, Steve                      |
| H04N 5/225                                     | (74) ir. M.F.J.M. Ketelaars c.s.     | GAIDAR, Tamara                    |
| H04N 5/232                                     | (31) 11183684                        | GOVEZENSKY, Yosi                  |
| (11) EP2852148                                 | 201213432417                         | (74) ir. W.J.J.M. Kempes          |
| (21) EP14158883.0                              | (32) 03.10.2011                      | (31) 201514750803                 |
| (22) 11.03.2014                                | 28.03.2012                           | (32) 25.06.2015                   |
| (54) Camera module                             | (33) European Patent Office (EPO)    | (33) United States of America     |
| (73) Samsung Electronics Co., Ltd.             | United States of America             | (47) 23.06.2021                   |
| (72) Hwang, Young-jae                          | (47) 31.03.2021                      | (51) G05D 23/19                   |
| Byon, Kwang-seok                               | (51) G05B 19/418                     | H01H 25/06                        |
| Lee, Seung-hwan                                | H04L 29/06                           | F24F 11/50                        |
| Jung, Bong-su                                  | H04L 29/08                           | (11) EP2769275                    |
| (74) ir. M.F.J.M. Ketelaars c.s.               | (11) EP3140963                       | (21) EP12842627.7                 |
| (31) 20130098132                               | (21) EP15789317.3                    | (22) 22.03.2012                   |
| (32) 19.08.2013                                |                                      |                                   |

|                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (54) USER-FRIENDLY, NETWORK<br>CONNECTED LEARNING<br>PROGRAMMABLE DEVICE AND<br>RELATED METHOD                                                                                                                                                                                                                                                                                                       | 102016015155<br>(32) 13.05.2016<br>20.12.2016<br>(33) Germany<br>Germany<br>(47) 07.04.2021                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (51) G06F 3/01<br>G06F 3/0481<br>G06F 3/0484<br>(11) EP3398030<br>(21) EP16823453.2<br>(22) 20.12.2016<br>(54) HAPTIC FEEDBACK FOR NON-TOUCH<br>SURFACE INTERACTION<br>(73) Microsoft Technology Licensing, LLC<br>(72) PAHUD, Michel<br>APACIBLE, Johnson T.<br>JUNUZOVIC, Sasa<br>BROWN, David W.<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 201514981719<br>(32) 28.12.2015<br>(33) United States of America<br>(47) 02.06.2021 |
| (73) Google LLC<br>(72) FADELL, Anthony<br>ROGERS, Matthew<br>SATTERTHWAITE, Edwin<br>SMITH, Ian<br>WARREN, Daniel<br>PALMER, Joseph<br>HONJO, Shigefumi<br>ERICKSON, Grant<br>DUTRA, Jonathon<br>FIENNES, Hugo<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 201161627996 P<br>(32) 21.10.2011<br>(33) United States of America<br>(47) 12.05.2021                                                    | (51) G06F 1/16<br>G06F 3/01<br>G06F 3/0346<br>G06F 3/0487<br>G06F 3/0488<br>(11) EP2758899<br>(21) EP11872811.2<br>(22) 21.09.2011<br>(54) GESTURE BASED SEARCH<br>(73) Microsoft Technology Licensing, LLC<br>(72) HUANG, Xuedong David<br>ZHANG, HongJiang<br>SHEN, Samuel Y.<br>RUI, Yong<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(47) 02.06.2021                                                                                                                                                                                                                                                                                          | (51) G06F 3/0354<br>(11) EP3605285<br>(21) EP19197513.5<br>(22) 07.12.2015<br>(54) ACTIVE CAPACITIVE STYLUS,<br>SENSOR CONTROLLER, RELATED<br>SYSTEM AND METHOD<br>(73) Wacom Co., Ltd.<br>(72) Watanabe, Naoki<br>(74) ir. W.J.J.M. Kempes<br>(31) 201562127176 P<br>201562140934 P<br>(32) 02.03.2015<br>31.03.2015<br>(33) United States of America<br>United States of America<br>(47) 26.05.2021                               |
| (51) G05F 1/67<br>H01L 35/28<br>(11) EP3469445<br>(21) EP17812888.0<br>(22) 14.06.2017<br>(54) THERMOELECTRIC GENERATOR<br>(73) Ariel Scientific Innovations Ltd.<br>(72) LINEYKIN, Simon<br>KUPERMAN, Alon<br>(74) ir. W.J.J.M. Kempes<br>(31) 201662349738 P<br>(32) 14.06.2016<br>(33) United States of America<br>(47) 31.03.2021                                                                | (51) G06F 1/16<br>G06F 3/01<br>G06F 3/14<br>G06F 3/048<br>G06F 3/0481<br>G06F 3/0482<br>G06F 3/0485<br>G06F 3/0487<br>G06F 3/0488<br>G06F 21/10<br>H04B 1/40<br>(11) EP2972679<br>(21) EP14762300.3<br>(22) 14.03.2014<br>(54) ELECTRONIC DEVICE AND<br>OPERATING METHOD THEREOF<br>(73) Samsung Electronics Co., Ltd.<br>(72) OH, Hun Cheol<br>KIM, Soo-Hyung<br>YOON, Seok-Hyun<br>KIM, Jin-Woo<br>KIM, Hyun-Jung<br>CHEONG, Cheol-Ho<br>HONG, Myunggon<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 201361782821 P<br>20140028355<br>(32) 14.03.2013<br>11.03.2014<br>(33) United States of America<br>Korea (Republic)<br>(47) 05.05.2021 | (51) G06F 3/048<br>G06F 3/0485<br>G06F 3/0488<br>G06F 16/957<br>(11) EP3268853<br>(21) EP15719868.0<br>(22) 13.03.2015<br>(54) DEVICE FOR HANDHELD OPERATION<br>AND METHOD THEREOF<br>(73) Telefonaktiebolaget LM Ericsson (PUBL)<br>(72) ÖKVIST, Peter<br>LINDEGREN, David<br>ARNGREN, Tommy<br>BURKERT, Till<br>(74) ir. A. Blokland c.s.<br>(47) 05.05.2021                                                                      |
| (51) G05F 3/26<br>G09G 3/14<br>H05B 45/10<br>H05B 45/345<br>H05B 45/397<br>(11) EP3528237<br>(21) EP19157716.2<br>(22) 18.02.2019<br>(54) CURRENT CORRECTION<br>TECHNIQUES FOR ACCURATE HIGH<br>CURRENT SHORT CHANNEL DRIVER<br>(73) Littelfuse, Inc.<br>(72) HOWE, Bret Ross<br>(74) J.M.H. Duyver lic.<br>(31) 201815899352<br>(32) 19.02.2018<br>(33) United States of America<br>(47) 02.06.2021 | (33) United States of America<br>Korea (Republic)<br>(47) 05.05.2021<br>(51) G06F 1/32<br>(11) EP2936271<br>(21) EP13821319.4<br>(22) 19.12.2013<br>(54) SERVER RACK FUEL CELL<br>(73) Microsoft Technology Licensing, LLC<br>(72) MCKNIGHT, Gregory Joseph<br>HARRIS, Shaun L.<br>JAMES, Sean M.<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 201213720966<br>(32) 19.12.2012<br>(33) United States of America<br>(47) 02.06.2021                                                                                                                                                                                                            | (51) G06F 3/06<br>G06F 12/02<br>(11) EP2929439<br>(21) EP13815285.5<br>(22) 09.12.2013<br>(54) USING A LOGICAL TO PHYSICAL<br>MAP FOR DIRECT USER SPACE<br>COMMUNICATION WITH A DATA<br>STORAGE DEVICE<br>(73) Google LLC<br>(72) BORCHERS, Albert, T.<br>GELB, Benjamin, S.<br>NORRIE, Thomas, J.<br>SWING, Andrew, T.<br>(74) ir. H.Th. van den Heuvel c.s.<br>(31) 201213709976<br>(32) 10.12.2012                               |
| (51) G05G 1/04<br>G05G 1/08<br>G05G 5/05<br>G05G 5/03<br>(11) EP3452360<br>(21) EP17723261.8<br>(22) 11.05.2017<br>(54) SYSTEM FOR CONTROLLING A WORK<br>MACHINE<br>(73) Liebherr-Werk Bishofshofen GmbH<br>(72) HETTEGGER, Mario<br>BÖS, Manuel<br>KNAPP, Hans<br>KIEGERL, Christoph<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 102016005984                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                     |



|                                          |                                          |                                          |
|------------------------------------------|------------------------------------------|------------------------------------------|
| (33) United States of America            | (72) HUANG, Alex                         | (21) EP19218260.8                        |
| (47) 05.05.2021                          | VITTAL, Chiradeep                        | (22) 28.03.2018                          |
| (51) G06F 3/12                           | CHAN, William                            | (54) CONFIGURATION MANAGEMENT            |
| (11) EP3074856                           | (74) ir. M.F.J.M. Ketelaars c.s.         | IDENTIFICATION RULE TESTING              |
| (21) EP14866365.1                        | (31) 201213369930                        | (73) ServiceNow, Inc.                    |
| (22) 25.11.2014                          | (32) 09.02.2012                          | (72) PUVVADA, Madhavi                    |
| (54) INFORMATION PROCESSING              | (33) United States of America            | GUPTA, Manish                            |
| APPARATUS, INFORMATION                   | (47) 19.05.2021                          | LAKSHMAN, Nikhil                         |
| PROCESSING METHOD, AND                   | (51) G06F 11/07                          | (74) dr. W.A.H.M. Van Borm               |
| PROGRAM                                  | G16H 40/40                               | (31) 201715588041                        |
| (73) Ricoh Company, Ltd.                 | (11) EP2476223                           | (32) 05.05.2017                          |
| (72) AOKI, Yosuke                        | (21) EP10815970.8                        | (33) United States of America            |
| MORIYAMA, Hitoshi                        | (22) 07.09.2010                          | (47) 26.05.2021                          |
| (74) ir. H.A. Witmans c.s.               | (54) METHODS AND ARTICLES OF             | (51) G06F 13/40                          |
| (31) 2013248687                          | MANUFACTURE FOR HOSTING A                | G06F 9/44                                |
| 2014054114                               | SAFETY CRITICAL APPLICATION              | (11) EP3420462                           |
| 2014231952                               | ON AN UNCONTROLLED DATA                  | (21) EP17756964.7                        |
| (32) 29.11.2013                          | PROCESSING DEVICE                        | (22) 30.01.2017                          |
| 17.03.2014                               | (73) Abbott Diabetes Care, Inc.          | (54) BUS BRIDGE FOR TRANSLATING          |
| 14.11.2014                               | (72) BERNSTEIN, Daniel M.                | REQUESTS BETWEEN A MODULE                |
| (33) Japan                               | NEKOOMARAM, Saeed                        | BUS AND AN AXI BUS                       |
| Japan                                    | SLOAN, Mark K.                           | (73) Honeywell International Inc.        |
| Japan                                    | (74) ir. F.A. Geurts c.s.                | (72) MANIKFAN, Sameer D.                 |
| (47) 26.05.2021                          | (31) 240578 P                            | KIRK, David Lyle                         |
| (51) G06F 9/30                           | 359265 P                                 | GUSTIN, Jay W.                           |
| G06F 9/455                               | (32) 08.09.2009                          | (74) ir. W.J.J.M. Kempes                 |
| (11) EP3117310                           | 28.06.2010                               | (31) 201615051239                        |
| (21) EP15708240.5                        | (33) United States of America            | (32) 23.02.2016                          |
| (22) 09.03.2015                          | United States of America                 | (33) United States of America            |
| (54) MANAGING PROCESSING                 | (47) 14.04.2021                          | (47) 19.05.2021                          |
| ASSOCIATED WITH SELECTED                 | (51) G06F 11/14                          | (51) G06F 15/173                         |
| ARCHITECTURAL FACILITIES                 | G06F 21/57                               | H04L 12/24                               |
| (73) International Business Machines     | (11) EP3507737                           | H04M 15/00                               |
| Corporation                              | (21) EP17762008.5                        | H04M 15/28                               |
| (72) GSCHWIND, Michael Karl              | (22) 25.08.2017                          | H04M 15/30                               |
| (74) J.M.H. Duyver lic.                  | (54) PRESERVING PROTECTED SECRETS        | H04W 4/24                                |
| (31) 201414217824                        | ACROSS A SECURE BOOT UPDATE              | (11) EP3483736                           |
| 201414554675                             | (73) Microsoft Technology Licensing, LLC | (21) EP18206756.1                        |
| (32) 18.03.2014                          | (72) KINSHUMANN, Kinshuman               | (22) 28.09.2011                          |
| 26.11.2014                               | MCCARRON, Christopher                    | (54) SYSTEM AND METHOD FOR               |
| (33) United States of America            | SAMSONOV, Yevgeniy Anatolievich          | PROVISIONING NETWORK SERVICE             |
| United States of America                 | (74) ir. M.F.J.M. Ketelaars c.s.         | PLANS                                    |
| (47) 09.06.2021                          | (31) 201615253521                        | (73) Headwater Research LLC              |
| (51) G06F 9/44                           | (32) 31.08.2016                          | (72) Raleigh, Gregory G.                 |
| (11) EP3224709                           | (33) United States of America            | Raissinia, Alireza                       |
| (21) EP15802292.1                        | (47) 02.06.2021                          | Lavine, James                            |
| (22) 17.11.2015                          | (51) G06F 11/20                          | James, Justin                            |
| (54) HARDWARE ACCELERATED VIRTUAL        | H04L 12/24                               | Green, Jeffrey                           |
| CONTEXT SWITCHING                        | H04L 12/26                               | (74) dr. ir. G.J.C. Verdijck c.s.        |
| (73) Microsoft Technology Licensing, LLC | H04L 29/08                               | (31) 38724310 P                          |
| (72) HEPKIN, David Alan                  | H04L 29/14                               | 42256510 P                               |
| (74) ir. M.F.J.M. Ketelaars c.s.         | (11) EP3242212                           | (32) 28.09.2010                          |
| (31) 201462084412 P                      | (21) EP15875116.4                        | 13.12.2010                               |
| 201514667879                             | (22) 21.12.2015                          | (33) United States of America            |
| (32) 25.11.2014                          | (54) AUTOMATIC SWITCHING METHOD          | United States of America                 |
| 25.03.2015                               | AND SYSTEM                               | (47) 21.04.2021                          |
| (33) United States of America            | (73) Nuctech Company Limited             | (51) G06F 16/955                         |
| United States of America                 | (72) TIAN, Long                          | (11) EP3443476                           |
| (47) 09.06.2021                          | WANG, Tao                                | (21) EP17718266.4                        |
| (51) G06F 9/50                           | NING, Hongzhi                            | (22) 05.04.2017                          |
| G06F 9/455                               | (74) dr. ir. G.J.C. Verdijck c.s.        | (54) USING WEB SEARCH ENGINES TO         |
| (11) EP2812799                           | (31) 201410838463                        | CORRECT DOMAIN NAMES USED                |
| (21) EP13710106.9                        | (32) 29.12.2014                          | FOR SOCIAL ENGINEERING                   |
| (22) 08.02.2013                          | (33) China                               | (73) Microsoft Technology Licensing, LLC |
| (54) TAGGING PHYSICAL RESOURCES          | (47) 14.04.2021                          | (72) AHARON, Arie                        |
| IN A CLOUD COMPUTING                     | (51) G06F 11/30                          | (74) J.M.H. Duyver lic.                  |
| ENVIRONMENT                              | G06F 11/36                               | (31) 201615096320                        |
| (73) Citrix Systems, Inc.                | (11) EP3654188                           | (32) 12.04.2016                          |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (33) United States of America<br>(47) 09.06.2021                                                                                                                                                                                                                                                                                                                                                         | DURHAM, David M.<br>SCHOINAS, Ioannis T.<br>CHHABRA, Siddhartha<br>ROZAS, Carlos V.<br>GERZON, Gideon                                                                                                                                                                                                                                                                                                                                                            | (54) AUTOMATIC SELECTION AND<br>LOCKING OF INTRAORAL IMAGES<br>(73) Align Technology, Inc.<br>(72) KOPELMAN, Avi<br>SABINA, Michael                                                                                                                                                                                                                                                                                                                                 |
| (51) G06F 21/31<br>G06F 21/32<br>G06F 21/36<br>G06F 21/62<br>G06F 21/74<br>(11) EP2690576<br>(21) EP13178085.0<br>(22) 25.07.2013                                                                                                                                                                                                                                                                        | (74) ir. W.J.J.M. Kempes<br>(31) 201715705562<br>(32) 15.09.2017<br>(33) United States of America<br>(47) 26.05.2021                                                                                                                                                                                                                                                                                                                                             | (74) ir. F.A. Geurts c.s.<br>(31) 201514640909<br>(32) 06.03.2015<br>(33) United States of America<br>(47) 21.04.2021                                                                                                                                                                                                                                                                                                                                               |
| (54) USER TERMINAL APPARATUS AND<br>CONTROL METHOD THEREOF<br>(73) Samsung Electronics Co., Ltd<br>(72) PARK, Sun-hwa<br>JUNG, Youn-gun<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 20120080999<br>(32) 25.07.2012<br>(33) Korea (Republic)<br>(47) 14.04.2021                                                                                                                                           | (51) G06K 7/10<br>G06K 19/07<br>(11) EP3188084<br>(21) EP16206842.3<br>(22) 23.12.2016<br>(54) SELF-RECONFIGURABLE ANTENNA<br>AND SELF-STEERING RFID TAGS<br>(73) Intermec Inc.<br>(72) NIKITIN, Pavel<br>KELLY, Stephen J.<br>(74) ir. W.J.J.M. Kempes<br>(31) 201514985634<br>201514985672<br>(32) 31.12.2015<br>31.12.2015<br>(33) United States of America<br>United States of America<br>(47) 07.04.2021                                                    | (51) G06T 3/40<br>H01L 27/32<br>H04M 1/02<br>H04N 5/225<br>H04N 5/247<br>H04M 1/725<br>(11) EP3624434<br>(21) EP17917157.4<br>(22) 07.07.2017<br>(54) TERMINAL PROVIDED WITH CAMERA,<br>AND PHOTOGRAPHING METHOD<br>(73) Huawei Technologies Co., Ltd.<br>(72) XU, Gang<br>SUN, Tuo<br>JAU, Hung-yuan<br>CHU, Chiaching<br>LIU, Kangchung<br>HOU, Hsienchang<br>LI, Xin                                                                                             |
| (51) G06F 21/31<br>G06F 21/57<br>(11) EP3528153<br>(21) EP19156626.4<br>(22) 12.02.2019<br>(54) SYSTEMS AND METHODS FOR<br>DETECTING AND TWARTING<br>ATTACKS ON AN IT ENVIRONMENT<br>(73) Citrix Systems, Inc.<br>(72) MEHROTRA, Mudit<br>BORKAR, Vipin<br>SANDHU, Vikramjeet S.<br>(74) ir. W.J.J.M. Kempes<br>(31) 201815900032<br>(32) 20.02.2018<br>(33) United States of America<br>(47) 05.05.2021 | (51) G06K 9/00<br>G06K 9/46<br>(11) EP3338217<br>(21) EP16777828.1<br>(22) 14.09.2016<br>(54) FEATURE DETECTION AND MASKING<br>IN IMAGES BASED ON COLOR<br>DISTRIBUTIONS<br>(73) Google LLC<br>(72) CHANG, Jason<br>(74) ir. H.Th. van den Heuvel c.s.<br>(31) 201514855297<br>(32) 15.09.2015<br>(33) United States of America<br>(47) 16.06.2021                                                                                                               | (74) dr. W.A.H.M. Van Borm<br>(47) 02.06.2021<br>(51) G06T 15/00<br>G06K 9/00<br>(11) EP3471020<br>(21) EP18208278.4<br>(22) 27.01.2006<br>(54) SYSTEMS AND METHODS FOR<br>VIEWING THREE DIMENSIONAL<br>VIRTUAL SLIDES<br>(73) Leica Biosystems Imaging Inc.<br>(72) EICHHORN, Ole<br>(74) ir. A.R. Aalbers<br>(31) 64754205 P<br>(32) 27.01.2005<br>(33) United States of America<br>(47) 03.03.2021                                                               |
| (51) G06F 21/62<br>(11) EP3576001<br>(21) EP19175542.0<br>(22) 21.05.2019<br>(54) COMPUTER-IMPLEMENTED METHOD<br>FOR TRANSFERRING A DATA STRING<br>FROM AN APPLICATION TO A DATA<br>PROTECTION DEVICE<br>(73) Comforte AG<br>(72) HORST, Henning<br>HORST, Michael<br>(74) ir. H.J.G. Lips c.s.<br>(31) 102018112742<br>(32) 28.05.2018<br>(33) Germany<br>(47) 23.06.2021                               | (51) G06Q 20/02<br>G06Q 20/38<br>G06Q 20/40<br>G06Q 40/00<br>G06Q 40/04<br>(11) EP3633585<br>(21) EP19211923.8<br>(22) 04.03.2016<br>(54) SYSTEMS AND METHODS FOR<br>UPDATING A DISTRIBUTED LEDGER<br>BASED ON PARTIAL VALIDATIONS OF<br>TRANSACTIONS<br>(73) Goldman Sachs & Co. LLC<br>(72) ARNOLD, Matthew, Timothy<br>NAEEM, Zartasha<br>(74) J.M.H. Duyver lic.<br>(31) 201514639895<br>(32) 05.03.2015<br>(33) United States of America<br>(47) 09.06.2021 | (51) G06T 19/00<br>A61B 34/10<br>A61B 34/20<br>A61B 90/00<br>(11) EP2996607<br>(21) EP14721077.7<br>(22) 13.03.2014<br>(54) SYSTEM TO FACILITATE<br>INTRAOPERATIVE POSITIONING AND<br>GUIDANCE<br>(73) THE CLEVELAND CLINIC<br>FOUNDATION<br>(72) WEST, Karl<br>GOEL, Vikash<br>FOSTER, James<br>(74) drs. C.M.A. Quintelier<br>(31) 201361787762 P<br>201361914700 P<br>(32) 15.03.2013<br>11.12.2013<br>(33) United States of America<br>United States of America |
| (51) G06F 21/71<br>G06F 21/79<br>(11) EP3657378<br>(21) EP20152004.6<br>(22) 15.08.2018<br>(54) PROVIDING ISOLATION IN<br>VIRTUALIZED SYSTEMS USING<br>TRUST DOMAINS<br>(73) INTEL Corporation<br>(72) SAHITA, Ravi L.<br>PATEL, Baiju V.<br>HUNTLEY, Barry E.<br>NEIGER, Gilbert<br>KHOSRAVI, Hormuzd M.<br>OUZIEL, Ido                                                                                 | (51) G06T 1/00<br>(11) EP3265993<br>(21) EP16709152.9<br>(22) 04.03.2016                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

|                                          |                                     |                                          |
|------------------------------------------|-------------------------------------|------------------------------------------|
| (47) 16.06.2021                          | (33) United States of America       | QI, Xiaojing                             |
| (51) G07F 9/00                           | (47) 26.05.2021                     | (74) ir. W.J.J.M. Kempes                 |
| G07F 9/02                                | (51) G09B 19/00                     | (31) 201410594095                        |
| H04L 29/06                               | (11) EP2839450                      | (32) 29.10.2014                          |
| G06Q 20/32                               | (21) EP13722510.8                   | (33) China                               |
| G06F 21/55                               | (22) 18.04.2013                     | (47) 28.04.2021                          |
| G06F 21/84                               | (54) BALL GAME APPARATUS            | (51) G10L 15/08                          |
| H04W 12/06                               | (73) World Golf Systems Limited     | G11B 20/10                               |
| (11) EP3221774                           | (72) JOLLIFFE, David Victor         | H04M 1/60                                |
| (21) EP15860331.6                        | JOLLIFFE, Steven Paul               | H04M 1/656                               |
| (22) 12.11.2015                          | (74) ir. J.C. Volmer c.s.           | G10L 17/00                               |
| (54) METHOD AND APPARATUS FOR            | (31) 201206827                      | G10L 25/78                               |
| DISPLAYING INFORMATION                   | (32) 18.04.2012                     | H04M 1/725                               |
| (73) Advanced New Technologies Co., Ltd. | (33) United Kingdom                 | (11) EP3438975                           |
| (72) LU, Kun                             | (47) 07.04.2021                     | (21) EP18179847.1                        |
| (74) dr. A. Krebs                        | (51) G09C 1/00                      | (22) 08.04.2011                          |
| (31) 201410670705                        | H04L 9/08                           | (54) SYSTEM AND METHOD OF SMART          |
| (32) 20.11.2014                          | H04L 9/30                           | AUDIO LOGGING FOR MOBILE                 |
| (33) China                               | H04L 9/32                           | DEVICES                                  |
| (47) 09.06.2021                          | (11) EP3161996                      | (73) QUALCOMM Incorporated               |
| (51) G08B 1/08                           | (21) EP15811003.1                   | (72) LEE, Te-Won                         |
| G08B 13/14                               | (22) 22.06.2015                     | EL-MALEH, Khaled                         |
| G08B 13/24                               | (54) SYSTEM AND DEVICE BINDING      | YOO, Heejong                             |
| G06Q 10/08                               | METADATA WITH HARDWARE              | SHIN, Jongwon                            |
| (11) EP3025286                           | INTRINSIC PROPERTIES                | (74) ir. M.F.J.M. Ketelaars c.s.         |
| (21) EP14829454.9                        | (73) Analog Devices, Inc.           | (31) 32217610 P                          |
| (22) 22.07.2014                          | (72) WALSH, John                    | 201113076242                             |
| (54) MOBILE RFID CONTAINER AND           | WALLRABENSTEIN, John Ross           | (32) 08.04.2010                          |
| DISTRIBUTION METHOD                      | (74) drs. A.A. Jilderda             | 30.03.2011                               |
| (73) Promega Corporation                 | (31) 201462017045 P                 | (33) United States of America            |
| (72) PLESHEK, Joseph                     | 201514704963                        | United States of America                 |
| GEORGE, Brian                            | (32) 25.06.2014                     | (47) 02.06.2021                          |
| PHILLIPS, Travis                         | 05.05.2015                          | (51) G10L 15/08                          |
| SEHMER, Mark                             | (33) United States of America       | H04L 29/00                               |
| (74) drs. C.M.A. Quintelier              | United States of America            | H04L 29/06                               |
| (31) 201361857987 P                      | (47) 28.04.2021                     | G10L 17/02                               |
| (32) 24.07.2013                          | (51) G09F 3/20                      | G10L 17/04                               |
| (33) United States of America            | G09F 7/10                           | G10L 17/14                               |
| (47) 16.06.2021                          | (11) EP3405941                      | (11) EP3327720                           |
| (51) G08G 1/01                           | (21) EP17705017.6                   | (21) EP16827187.2                        |
| (11) EP3073461                           | (22) 17.01.2017                     | (22) 14.07.2016                          |
| (21) EP16160939.1                        | (54) METHOD FOR ATTACHING MARKING   | (54) USER VOICEPRINT MODEL               |
| (22) 17.03.2016                          | LABELS TO A PLURALITY OF            | CONSTRUCTION METHOD AND                  |
| (54) METHOD AND APPARATUS FOR            | ELECTRICAL DEVICES WHICH CAN        | APPARATUS                                |
| CALCULATING SPEED VALUES FOR             | BE ARRANGED ON A SUPPORT RAIL       | (73) Advanced New Technologies Co., Ltd. |
| STRANDS OF ROAD SEGMENTS                 | (73) Phoenix Contact GmbH & Co. KG  | (72) LING, Qing                          |
| (73) HERE Global B.V.                    | (72) KLAGES, Kilian                 | (74) ir. W.J.J.M. Kempes                 |
| (72) Fowe, James                         | PROBACH, Nicole                     | (31) 201510438382                        |
| (74) drs. C.M.A. Quintelier              | GROSSMANN, Christian                | (32) 23.07.2015                          |
| (31) 201514663134                        | NAGUSCHEWSKI, Bernd                 | (33) China                               |
| (32) 19.03.2015                          | (31) 102016100722                   | (47) 05.05.2021                          |
| (33) United States of America            | 102016107459                        | (51) G10L 19/02                          |
| (47) 09.06.2021                          | (32) 18.01.2016                     | G10L 19/06                               |
| (51) G08G 5/00                           | 22.04.2016                          | G10L 25/12                               |
| G08G 5/02                                | (33) Germany                        | (11) EP3699910                           |
| G06Q 10/08                               | Germany                             | (21) EP20167436.3                        |
| (11) EP3163396                           | (47) 28.04.2021                     | (22) 20.02.2015                          |
| (21) EP16194642.1                        | (51) G09G 3/20                      | (54) PERIODIC-COMBINED-ENVELOPE-         |
| (22) 19.10.2016                          | G11C 19/28                          | SEQUENCE GENERATION DEVICE,              |
| (54) METHOD AND APPARATUS FOR            | (11) EP3214614                      | PERIODIC-COMBINED-ENVELOPE-              |
| REPRESENTING AN AERIAL                   | (21) EP15750617.1                   | SEQUENCE GENERATION METHOD,              |
| DELIVERY PATH                            | (22) 06.03.2015                     | PERIODIC-COMBINED-ENVELOPE-              |
| (73) HERE Global B.V.                    | (54) SHIFT REGISTER UNIT, DISPLAY   | SEQUENCE GENERATION PROGRAM              |
| (72) Modica, Leo                         | PANEL AND DISPLAY DEVICE            | AND RECORDING MEDIUM                     |
| Stenneth, Leon                           | (73) BOE Technology Group Co., Ltd. | (73) Nippon Telegraph and Telephone      |
| (74) ir. A. Blokland c.s.                | Chengdu BOE Optoelectronics         | Corporation                              |
| (31) 201514925565                        | Technology Co., Ltd.                | (72) MORIYA, Takehiro                    |
| (32) 28.10.2015                          | (72) QING, Haigang                  | KAMAMOTO, Yutaka                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HARADA, Noboru<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 2014094880<br>(32) 01.05.2014<br>(33) Japan<br>(47) 26.05.2021                                                                                                                                                                                                                                                                                                                                                                                                                               | (54) CIRCUIT-BREAKER WITH<br>REDUCED BREAKDOWN VOLTAGE<br>REQUIREMENT<br>(73) Eaton Intelligent Power Limited<br>(72) ASKAN, Kenan<br>(74) J.M.H. Duyver lic.<br>(31) 201818407<br>(32) 12.11.2018<br>(33) United Kingdom<br>(47) 21.04.2021                                                                                                                                                                                                                                            | (51) H01L 21/67<br>H01L 21/677<br>H01L 21/68<br>H05K 13/02<br>H05K 13/04<br>H05K 13/08<br>(11) EP3610500<br>(21) EP17726196.3<br>(22) 11.04.2017<br>(54) COMPONENT RECEPTION<br>APPARATUS WITH OPTICAL SENSOR<br>(73) Mühlbauer GmbH & Co. KG<br>(72) KOCH, Konstantin<br>(74) ir. H.A. Witmans c.s.<br>(47) 31.03.2021                                                                                                                                                                              |
| (51) G11C 16/04<br>H01L 21/28<br>H01L 29/423<br>H01L 29/788<br>H01L 27/11539<br>(11) EP3497723<br>(21) EP17839956.4<br>(22) 18.05.2017<br>(54) METHOD OF FORMING LOW HEIGHT<br>SPLIT GATE MEMORY CELLS<br>(73) Silicon Storage Technology Inc.<br>(72) SU, Chien-Sheng<br>YANG, Jeng-Wei<br>WU, Man-Tang<br>CHEN, Chun-Ming<br>TRAN, Hieu Van<br>DO, Nhan<br>(74) ir. H.Th. van den Heuvel c.s.<br>(31) 201662372247 P<br>201715594883<br>(32) 08.08.2016<br>15.05.2017<br>(33) United States of America<br>United States of America<br>(47) 21.04.2021 | (51) H01H 9/54<br>H01H 71/04<br>H01H 71/08<br>H01R 9/26<br>H01R 13/717<br>H01R 25/14<br>H02B 1/052<br>H05K 7/14<br>(11) EP3326191<br>(21) EP16729203.6<br>(22) 23.05.2016<br>(54) POWER DISTRIBUTOR<br>(73) Ellenberger & Poensgen GmbH<br>(72) FISCHER, Erich<br>WERNER, Klaus<br>(74) dr. ir. G.J.C. Verdijk c.s.<br>(31) 102015213744<br>(32) 21.07.2015<br>(33) Germany<br>(47) 07.04.2021                                                                                          | (51) H01L 23/10<br>H01L 23/498<br>H01L 23/538<br>(11) EP3523824<br>(21) EP17791940.4<br>(22) 06.10.2017<br>(54) HOUSING FOR A PRIMARY<br>ELECTRONIC COMPONENT, HAVING<br>A SECONDARY ELECTRONIC<br>COMPONENT EMBEDDED WITHIN<br>THE COVER OR BASE OF THE<br>HOUSING<br>(73) Possehl Electronics Deutschland GmbH<br>(72) KURZEJA, Dietmar<br>(31) 102016011934<br>202016006195 U<br>(32) 06.10.2016<br>06.10.2016<br>(33) Germany<br>Germany<br>(47) 05.05.2021                                      |
| (51) H01F 3/04<br>H02K 1/18<br>H02K 1/27<br>H02K 15/02<br>H02K 15/03<br>H02K 15/12<br>(11) EP3389169<br>(21) EP16872946.5<br>(22) 06.12.2016<br>(54) LAMINATED CORE MANUFACTURING<br>METHOD, INNER CORE, AND OUTER<br>CORE<br>(73) Yoshikawa Kogyo Co., Ltd.<br>(72) MORI, Yuji<br>(74) ir. H.A. Witmans c.s.<br>(31) 2015238259<br>(32) 07.12.2015<br>(33) Japan<br>(47) 23.06.2021                                                                                                                                                                    | (51) H01J 37/32<br>(11) EP3602601<br>(21) EP18715016.4<br>(22) 29.03.2018<br>(54) PLASMA GENERATOR, PLASMA<br>TREATMENT DEVICE, AND METHOD<br>FOR PROVIDING ELECTRIC POWER<br>IN A PULSED MANNER<br>(73) centrotherm international AG<br>(72) SCHULZ, Sebastian Hubertus<br>PERNAU, Thomas<br>NACHBAUER, Florian<br>WALK, Felix<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 102017205582<br>102018204585<br>(32) 31.03.2017<br>26.03.2018<br>(33) Germany<br>Germany<br>(47) 05.05.2021 | (51) H01L 27/02<br>H01L 27/07<br>H01L 27/108<br>H01L 27/11556<br>H01L 27/11582<br>(11) EP3679605<br>(21) EP18854433.2<br>(22) 31.08.2018<br>(54) MEMORY ARRAYS COMPRISING<br>VERTICALLY-ALTERNATING TIERS OF<br>INSULATIVE MATERIAL AND MEMORY<br>CELLS AND METHODS OF FORMING<br>A MEMORY ARRAY<br>(73) Micron Technology, Inc.<br>(72) RAMASWAMY, Durai Vishak, Nirmal<br>(74) ir. H.A. Witmans c.s.<br>(31) 201762554972 P<br>(32) 06.09.2017<br>(33) United States of America<br>(47) 14.04.2021 |
| (51) H01H 9/54<br>(11) EP3514814<br>(21) EP19151301.9<br>(22) 11.01.2019<br>(54) ELECTRICAL CIRCUIT BREAKER<br>ASSEMBLY<br>(73) Eaton Intelligent Power Limited<br>(72) ASKAN, Kenan<br>BARTONEK, Michael<br>(74) J.M.H. Duyver lic.<br>(31) 102018101311<br>(32) 22.01.2018<br>(33) Germany<br>(47) 07.04.2021                                                                                                                                                                                                                                         | (51) H01J 61/067<br>H01J 65/04<br>(11) EP3648143<br>(21) EP18204296.0<br>(22) 05.11.2018<br>(54) VACUUM ULTRAVIOLET EXCIMER<br>LAMP WITH A THIN WIRE INNER<br>ELECTRODE<br>(73) Xylem Europe GmbH<br>(72) SALVERMOSER, Manfred<br>BRÜGGEMANN, Nicole<br>FIETZEK, Reiner<br>FIEKENS, Ralf<br>KANIGOWSKI, Uwe<br>WOJCIECHOWSKI, André<br>(74) dr. P.L. Ringeling<br>(47) 19.05.2021                                                                                                       | (51) H01L 27/32<br>H01L 51/52<br>(11) EP3029751<br>(21) EP15187959.0<br>(22) 01.10.2015<br>(54) ORGANIC LIGHT-EMITTING DISPLAY<br>APPARATUS AND METHOD OF<br>MANUFACTURING THE SAME<br>(73) Samsung Display Co., Ltd.<br>(72) Lee, Seho<br>Kim, Taehyung<br>Jeong, Byoung-Seong                                                                                                                                                                                                                      |

|                                   |                                          |                                          |
|-----------------------------------|------------------------------------------|------------------------------------------|
| (74) ir. M.F.J.M. Ketelaars c.s.  | (51) H01M 4/62                           | (74) ir. W.J.J.M. Kempes                 |
| (31) 20140170834                  | H01M 10/42                               | (47) 14.04.2021                          |
| (32) 02.12.2014                   | H01M 4/13                                | (51) H01R 13/502                         |
| (33) Korea (Republic)             | H01M 10/052                              | H01R 13/627                              |
| (47) 05.05.2021                   | (11) EP3573147                           | H01R 13/639                              |
| (51) H01L 29/10                   | (21) EP18839320.1                        | (11) EP3413406                           |
| H01L 29/66                        | (22) 26.07.2018                          | (21) EP16890177.5                        |
| H01L 29/732                       | (54) POSITIVE ELECTRODE FOR LITHIUM      | (22) 18.02.2016                          |
| H01L 29/747                       | SECONDARY BATTERY AND LITHIUM            | (54) INDUSTRIAL CONNECTOR AND            |
| H02M 3/158                        | SECONDARY BATTERY INCLUDING              | CONNECTION STRUCTURE                     |
| H03K 17/0412                      | SAME                                     | (73) Shenzhen Linko Electric Co., Ltd.   |
| H03K 17/567                       | (73) LG Chem, Ltd.                       | (72) Lin, Shunhua                        |
| H03K 17/60                        | (72) KIM, Kyung-Min                      | (74) P.J. Pollard B.Eng                  |
| (11) EP3350914                    | CHOI, Jung-Seok                          | (47) 07.04.2021                          |
| (21) EP16847338.7                 | OH, Song-Taek                            | (51) H01R 24/76                          |
| (22) 15.09.2016                   | (74) J.M.H. Duyver lic.                  | H01H 1/58                                |
| (54) OPERATION OF DOUBLE-BASE     | (31) 20170094550                         | H01H 23/14                               |
| BIPOLAR TRANSISTORS WITH          | 20180086694                              | H01R 4/48                                |
| ADDITIONAL TIMING PHASES AT       | (32) 26.07.2017                          | H01R 103/00                              |
| SWITCHING TRANSITIONS             | 25.07.2018                               | H02G 3/12                                |
| (73) Ideal Power Inc.             | (33) Korea (Republic)                    | H02G 3/14                                |
| (72) ALEXANDER, William C.        | Korea (Republic)                         | (11) EP3687007                           |
| BLANCHARD, Richard A.             | (47) 26.05.2021                          | (21) EP19153208.4                        |
| (74) ir. F.A. Geurts c.s.         | (51) H01M 10/42                          | (22) 23.01.2019                          |
| (31) 201562218978 P               | H02J 7/02                                | (54) ELECTRICAL INSTALLATION             |
| 201562239815 P                    | H02J 50/10                               | APPARATUS WITH RELEASE LEVER             |
| (32) 15.09.2015                   | (11) EP3583677                           | (73) Gira Giersiepen GmbH & Co. Kg       |
| 09.10.2015                        | (21) EP18710586.1                        | (72) KALINKE, Jens                       |
| (33) United States of America     | (22) 09.02.2018                          | (74) ir. A. Blokland c.s.                |
| United States of America          | (54) SMART BATTERY FOR ULTRAFast         | (47) 16.06.2021                          |
| (47) 07.04.2021                   | CHARGING                                 | (51) H01R 25/16                          |
| (51) H01L 31/0236                 | (73) Microsoft Technology Licensing, LLC | H02K 3/52                                |
| H01L 31/068                       | (72) KUCHIBHATLA, Ramesh                 | H02K 5/22                                |
| (11) EP2618382                    | ALI, Bahram                              | (11) EP3425776                           |
| (21) EP11825008.3                 | (74) ir. M.F.J.M. Ketelaars c.s.         | (21) EP17760313.1                        |
| (22) 05.09.2011                   | (31) 201715436327                        | (22) 02.03.2017                          |
| (54) SOLAR CELL AND MANUFACTURING | (32) 17.02.2017                          | (54) BUSBAR ASSEMBLY AND MOTOR           |
| METHOD THEREOF                    | (33) United States of America            | COMPRISING SAME                          |
| (73) Shin-Etsu Chemical Co., Ltd. | (47) 02.06.2021                          | (73) LG Innotek Co., Ltd.                |
| (72) MORIYAMA, Shun               | (51) H01M 50/20                          | (72) LEE, Jung Kyu                       |
| WATABE, Takenori                  | H01M 50/50                               | LIM, Hee Soo                             |
| MURAKAMI, Takashi                 | (11) EP3475998                           | (74) dr. A. Ellens c.s.                  |
| TSUKIGATA, Shintarou              | (21) EP17736579.8                        | (31) 20160025260                         |
| TAKAHASHI, Mitsuhito              | (22) 19.06.2017                          | 20160058838                              |
| OTSUKA, Hiroyuki                  | (54) ACCUMULATOR MODUL                   | (32) 02.03.2016                          |
| (74) ir. M.F.J.M. Ketelaars c.s.  | (73) Commeo GmbH                         | 13.05.2016                               |
| (31) 2010205162                   | (72) SCHNAKENBERG, Michael               | (33) Korea (Republic)                    |
| (32) 14.09.2010                   | (74) dr. W.A.H.M. Van Borm               | Korea (Republic)                         |
| (33) Japan                        | (31) 202016103300 U                      | (47) 05.05.2021                          |
| (47) 05.05.2021                   | (32) 22.06.2016                          | (51) H02G 3/22                           |
| (51) H01M 4/46                    | (33) Germany                             | H02G 15/013                              |
| H01M 6/04                         | (47) 02.06.2021                          | (11) EP3392988                           |
| H01M 6/32                         | (51) H01Q 1/24                           | (21) EP17166787.6                        |
| H01M 6/34                         | H01Q 1/38                                | (22) 18.04.2017                          |
| (11) EP3598547                    | H01Q 1/48                                | (54) SEALED CABLE PASSAGE                |
| (21) EP19183029.8                 | H01Q 1/52                                | (73) Roxtec AB                           |
| (22) 27.06.2019                   | (11) EP3229318                           | (72) Einwächter, Michael                 |
| (54) WATER-ACTIVATED POWER        | (21) EP14909422.9                        | (74) mr. ir. J. van Breda c.s.           |
| GENERATING DEVICE                 | (22) 30.12.2014                          | (47) 26.05.2021                          |
| (73) Liaw, Kuo Ming               | (54) ANTENNA DEVICE AND TERMINAL         | (51) H02J 1/12                           |
| Kao, Sung Nien                    | (73) Huawei Technologies Co., Ltd.       | (11) EP3602714                           |
| (72) Liaw, Kuo Ming               | (72) MAO, Zhengyan                       | (21) EP18730241.9                        |
| Kao, Sung Nien                    | WANG, Kemeng                             | (22) 23.05.2018                          |
| (74) dr. A. Krebs                 | ZHU, Dejin                               | (54) REDUNDANT DIRECT CURRENT            |
| (31) 201816037071                 | GAO, Xiaoping                            | NETWORK                                  |
| (32) 17.07.2018                   | GONG, Yiwen                              | (73) Siemens Energy Global GmbH & Co. KG |
| (33) United States of America     | WU, Song                                 | (72) GRITSCH, Christian                  |
| (47) 02.06.2021                   | WANG, Wei                                |                                          |

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|-------------------------------------|---------------------------------------------|---------------------------------------------|
| (74) ir. M.F.J.M. Ketelaars c.s.    | (73) Flender GmbH                           | (11) EP3685511                              |
| (31) 17172717                       | (72) Madsen, Anders Jakob                   | (21) EP17777664.8                           |
| (32) 24.05.2017                     | Valboern, Jesper                            | (22) 19.09.2017                             |
| (33) European Patent Office (EPO)   | (74) ir. M.F.J.M. Ketelaars c.s.            | (54) RADIO NETWORK NODE AND                 |
| (47) 21.04.2021                     | (47) 07.04.2021                             | METHOD THEREIN FOR DECIDING                 |
| (51) H02J 3/14                      | (51) H02K 3/52                              | AGC MODE FOR A RECEIVED SIGNAL              |
| H02J 3/32                           | H02K 5/04                                   | IN A WIRELESS COMMUNICATIONS                |
| H02J 3/38                           | H02K 5/22                                   | NETWORK                                     |
| (11) EP3590169                      | (11) EP3487045                              | (73) Telefonaktiebolaget LM Ericsson (Publ) |
| (21) EP18707029.7                   | (21) EP17831217.9                           | (72) LIAO, Jichang                          |
| (22) 22.02.2018                     | (22) 19.06.2017                             | HAMMARBERG, Erik                            |
| (54) ENERGY MANAGEMENT METHOD       | (54) MOTOR                                  | BJÖRK, Vimar                                |
| FOR AN ENERGY SYSTEM, AND           | (73) LG Innotek Co., Ltd.                   | (74) ir. A. Blokland c.s.                   |
| ENERGY SYSTEM                       | (72) OH, Sung Joo                           | (47) 02.06.2021                             |
| (73) Viessmann Climate Solutions SE | HYUN, Woo Jin                               | (51) H03H 17/02                             |
| (72) ARNOLD, Christian              | (74) J.M.H. Duyver lic.                     | G10L 19/02                                  |
| HAFNER, Bernd                       | (31) 20160090916                            | G10L 19/022                                 |
| LÖDIGE, Daniel                      | (32) 18.07.2016                             | G10L 21/038                                 |
| STRUBEL, Jan                        | (33) Korea (Republic)                       | G10L 25/45                                  |
| (74) ir. M.F.J.M. Ketelaars c.s.    | (47) 07.04.2021                             | (11) EP3288027                              |
| (31) 102017203249                   | (51) H02K 5/22                              | (21) EP17169583.6                           |
| (32) 28.02.2017                     | H05K 1/11                                   | (22) 23.10.2007                             |
| (33) Germany                        | (11) EP3331133                              | (54) APPARATUS AND METHOD FOR               |
| (47) 07.04.2021                     | (21) EP17201236.1                           | GENERATING COMPLEX-VALUED                   |
| (51) H02J 3/14                      | (22) 13.11.2017                             | AUDIO SUBBAND VALUES                        |
| H02J 13/00                          | (54) CONTROL HOUSING WITH                   | (73) Fraunhofer-Gesellschaft zur Förderung  |
| G06Q 10/06                          | SIMULTANEOUS CONNECTION FOR A               | der angewandten Forschung e.V.              |
| G06Q 50/06                          | CIRCULATION PUMP                            | (72) Schnell, Markus                        |
| (11) EP3662558                      | (73) Wilo Intec                             | Lutzky, Manfred                             |
| (21) EP18735358.6                   | (72) LE STRAT, Olivier                      | Lohwasser, Markus                           |
| (22) 16.05.2018                     | (74) ir. H.A. Witmans c.s.                  | Schmidt, Markus                             |
| (54) SMOOTHING OF A LOAD CURVE      | (31) 1661061                                | Gayer, Marc                                 |
| COMPRISING AN AGGREGATION OF        | (32) 15.11.2016                             | Mellar, Michael                             |
| ELEMENTARY LOAD CURVES              | (33) France                                 | Edler, Bernd                                |
| (73) Voltalis SA                    | (47) 02.06.2021                             | Multrus, Markus                             |
| (72) BINEAU, Mathieu                | (51) H02M 1/34                              | Schuller, Gerald                            |
| AUTORD, Marc                        | H02M 7/487                                  | Geiger, Ralf                                |
| PINARD, Benjamin                    | (11) EP2945269                              | Grill, Bernhard                             |
| TAN, Christophe                     | (21) EP15162990.4                           | (74) ir. F.A. Geurts c.s.                   |
| OURY, Jean Marc                     | (22) 09.04.2015                             | (31) 862954 P                               |
| HEINTZ, Bruno                       | (54) NEUTRAL POINT CONVERTER                | (32) 25.10.2006                             |
| (74) ir. W.J.J.M. Kempes            | COMPRISING A VOLTAGE CLAMP                  | (33) United States of America               |
| (31) 1757323                        | CIRCUIT                                     | (47) 07.04.2021                             |
| (32) 31.07.2017                     | (73) Delta Electronics (Shanghai) Co., Ltd. | (51) H03M 1/10                              |
| (33) France                         | (72) Feng, Wei-Yi                           | H03M 1/12                                   |
| (47) 14.04.2021                     | Zhang, Wei-Qiang                            | (11) EP3042447                              |
| (51) H02K 1/12                      | Wu, Hong-Yang                               | (21) EP14789979.3                           |
| H02K 1/34                           | (74) ir. M.F.J.M. Ketelaars c.s.            | (22) 05.09.2014                             |
| H02K 41/02                          | (31) 201410158011                           | (54) MEASURING AMPLIFIER WITH               |
| H02K 41/03                          | (32) 18.04.2014                             | BACKGROUND ADJUSTMENT AND                   |
| (11) EP3326276                      | (33) China                                  | METHOD THEREFOR                             |
| (21) EP16827360.5                   | (47) 26.05.2021                             | (73) Hottinger Brüel & Kjaer GmbH           |
| (22) 18.07.2016                     | (51) H02P 8/36                              | (72) SCHÄCK, Marco M.                       |
| (54) TRANSVERSE FLUX LINEAR MOTOR   | (11) EP3557757                              | KITZING, Herbert                            |
| (73) MOTX Ltd.                      | (21) EP19160450.3                           | (74) ir. H.A. Witmans c.s.                  |
| (72) VILLARET, Yves                 | (22) 04.03.2019                             | (31) 102013014876                           |
| (74) ir. W.J.J.M. Kempes            | (54) METHOD FOR DETECTING STEPPING          | (32) 06.09.2013                             |
| (31) 201562194300 P                 | MOTORS VARIANTS                             | (33) Germany                                |
| (32) 20.07.2015                     | (73) Vaillant GmbH                          | (47) 21.04.2021                             |
| (33) United States of America       | (72) Wölfl, Carsten                         | (51) H03M 5/18                              |
| (47) 31.03.2021                     | (74) J.M.H. Duyver lic.                     | H04L 25/02                                  |
| (51) H02K 1/14                      | (31) 102018107802                           | H04L 27/02                                  |
| H02K 7/18                           | (32) 03.04.2018                             | (11) EP3539217                              |
| (11) EP2672610                      | (33) Germany                                | (21) EP18763337.5                           |
| (21) EP12171251.7                   | (47) 07.04.2021                             | (22) 26.02.2018                             |
| (22) 08.06.2012                     | (51) H03G 3/30                              | (54) MODULATION FOR A DATA BIT              |
| (54) Modular stator and method of   | H04B 1/10                                   | STREAM                                      |
| manufacturing the same              |                                             | (73) BlackBerry Limited                     |

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| (72) QU, Shouxing                           | 07.04.2010                                  | (31) 201762489627 P                         |
| (74) dr. W.A.H.M. Van Borm                  | (33) United States of America               | 201762490882 P                              |
| (31) 201715451071                           | United States of America                    | 201762520995 P                              |
| (32) 06.03.2017                             | (47) 02.06.2021                             | 201762527234 P                              |
| (33) United States of America               | (51) H03M 13/00                             | 201762530758 P                              |
| (47) 16.06.2021                             | H03M 13/13                                  | 201762532864 P                              |
| (51) H03M 7/30                              | (11) EP3673581                              | 201815961546                                |
| G10L 19/00                                  | (21) EP18769796.6                           | (32) 25.04.2017                             |
| H04N 19/94                                  | (22) 21.08.2018                             | 27.04.2017                                  |
| (11) EP3111560                              | (54) UPO COMPLIANT INFORMATION              | 16.06.2017                                  |
| (21) EP15713034.5                           | SEQUENCES FOR POLAR CODES                   | 30.06.2017                                  |
| (22) 26.02.2015                             | (73) Telefonaktiebolaget LM Ericsson (publ) | 10.07.2017                                  |
| (54) METHOD AND APPARATUS FOR               | (72) HUI, Dennis                            | 14.07.2017                                  |
| PYRAMID VECTOR QUANTIZATION                 | BLANKENSHIP, Yufei                          | 24.04.2018                                  |
| INDEXING AND DE-INDEXING OF                 | BRESCHER, Michael                           | (33) United States of America               |
| AUDIO/VIDEO SAMPLE VECTORS                  | (74) ir. A. Blokland c.s.                   | United States of America                    |
| (73) Telefonaktiebolaget LM Ericsson (publ) | (31) 201762548237 P                         | United States of America                    |
| (72) SVEDBERG, Jonas                        | (32) 21.08.2017                             | United States of America                    |
| (74) ir. A. Blokland c.s.                   | (33) United States of America               | United States of America                    |
| (31) 201461945403 P                         | (47) 02.06.2021                             | United States of America                    |
| (32) 27.02.2014                             | (51) H03M 13/03                             | United States of America                    |
| (33) United States of America               | H03M 13/11                                  | (47) 02.06.2021                             |
| (47) 26.05.2021                             | H03M 13/25                                  | (51) H04B 7/06                              |
| (51) H03M 13/00                             | H03M 13/27                                  | H04B 7/0456                                 |
| H03M 13/09                                  | H03M 13/29                                  | (11) EP3345308                              |
| H03M 13/13                                  | H04L 1/00                                   | (21) EP15767608.1                           |
| H03M 13/29                                  | (11) EP3544187                              | (22) 04.09.2015                             |
| H04L 1/00                                   | (21) EP17870930.9                           | (54) PRECODING A TRANSMISSION               |
| (11) EP3474474                              | (22) 06.11.2017                             | FROM AN ANTENNA ARRAY THAT                  |
| (21) EP18752076.2                           | (54) TRANSMISSION SCHEME USING              | INCLUDES CO-POLARIZED ANTENNA               |
| (22) 04.05.2018                             | LDPC CODES OF LENGTH 69120 AND              | ELEMENTS ALIGNED IN A GIVEN                 |
| (54) ENCODING METHOD AND DEVICE             | RATE 11/16 AND 12/16                        | SPATIAL DIMENSION                           |
| (73) HUAWEI TECHNOLOGIES CO., LTD.          | (73) Sony Corporation                       | (73) Telefonaktiebolaget LM Ericsson (publ) |
| (72) HUANG, Lingchen                        | (72) SHINOHARA Yuji                         | (72) WERNERSSON, Niklas                     |
| DAI, Shengchen                              | YAMAMOTO Makiko                             | FAXÉR, Sebastian                            |
| XU, Chen                                    | (74) ir. W.J.J.M. Kempes                    | BERGMAN, Svante                             |
| QIAO, Yunfei                                | (31) 2016224606                             | (74) ir. A. Blokland c.s.                   |
| LI, Rong                                    | (32) 18.11.2016                             | (47) 26.05.2021                             |
| (74) ir. W.J.J.M. Kempes                    | (33) Japan                                  | (51) H04B 7/06                              |
| (31) 201710807301                           | (47) 02.06.2021                             | H04L 1/00                                   |
| (32) 08.09.2017                             | (51) H04B 7/04                              | H04L 5/00                                   |
| (33) China                                  | (11) EP3704801                              | H04W 72/04                                  |
| (47) 28.04.2021                             | (21) EP17812046.5                           | H04B 7/0408                                 |
| (51) H03M 13/00                             | (22) 30.10.2017                             | (11) EP3539223                              |
| H03M 13/09                                  | (54) CODEBOOK DESIGN FOR                    | (21) EP17785069.0                           |
| H03M 13/23                                  | VIRTUALIZED ACTIVE ANTENNA                  | (22) 25.09.2017                             |
| H03M 13/29                                  | SYSTEM (AAS)                                | (54) SIGNALING BEAMFORMING                  |
| H04B 7/14                                   | (73) Telefonaktiebolaget LM Ericsson (publ) | RELATIONSHIPS BETWEEN CONTROL               |
| H04J 11/00                                  | (72) QIANG, Yongquan                        | AND DATA CHANNELS                           |
| H04L 1/00                                   | FANTAYE, Gium                               | (73) QUALCOMM Incorporated                  |
| H04L 1/18                                   | LONG, Jianguo                               | (72) JOHN WILSON, Makesh Pravin             |
| H04L 5/00                                   | REN, Hong                                   | LUO, Tao                                    |
| H04W 72/12                                  | (74) ir. A. Blokland c.s.                   | SAMPATH, Ashwin                             |
| (11) EP3142264                              | (47) 19.05.2021                             | NAGARAJA, Sumeeth                           |
| (21) EP16196621.3                           | (51) H04B 7/06                              | SUBRAMANIAN, Sundar                         |
| (22) 27.04.2010                             | H04B 7/0417                                 | CEZANNE, Juergen                            |
| (54) METHOD AND APPARATUS FOR               | H04B 7/0456                                 | AKKARAKARAN, Sony                           |
| DATA COMMUNICATION IN A                     | (11) EP3602834                              | (74) ir. M.F.J.M. Ketelaars c.s.            |
| COMMUNICATION SYSTEM                        | (21) EP18790463.6                           | (31) 201662420036 P                         |
| (73) Samsung Electronics Co., Ltd.          | (22) 25.04.2018                             | 201715713074                                |
| (72) Nam, Young-Han                         | (54) METHOD AND APPARATUS FOR               | (32) 10.11.2016                             |
| Wang, Yan                                   | HIGHER RANK CSI REPORTING                   | 22.09.2017                                  |
| Zhang, Jianzhong                            | IN ADVANCED WIRELESS                        | (33) United States of America               |
| Khan, Farooq                                | COMMUNICATION SYSTEMS                       | United States of America                    |
| (74) ir. M.F.J.M. Ketelaars c.s.            | (73) Samsung Electronics Co., Ltd.          | (47) 09.06.2021                             |
| (31) 214757 P                               | (72) RAHMAN, Md Saifur                      | (51) H04B 7/06                              |
| 756080                                      | ONGGOSANUSI, Eko                            | H04W 36/30                                  |
| (32) 27.04.2009                             | (74) ir. M.F.J.M. Ketelaars c.s.            | H04W 72/04                                  |

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| H04W 72/08                                  | 20080110614                         | RAHMAN, Md Saifur                  |
| H04B 7/0417                                 | 20080110784                         | NG, Boon Loong                     |
| (11) EP3607668                              | 20090068880                         | ONGGOSANUSI, Eko                   |
| (21) EP18720787.3                           | (32) 29.09.2008                     | KWAK, Youngwoo                     |
| (22) 06.04.2018                             | 03.11.2008                          | NOH, Hoondong                      |
| (54) CELL QUALITY DERIVATION BASED          | 07.11.2008                          | (74) ir. M.F.J.M. Ketelaars c.s.   |
| ON FILTERED BEAM MEASUREMENTS               | 10.11.2008                          | (31) 201562219454 P                |
| (73) Telefonaktiebolaget LM Ericsson (publ) | 28.07.2009                          | 201562233011 P                     |
| (72) DA SILVA, Icaro L. J.                  | (33) Korea (Republic)               | 201562251384 P                     |
| RUNE, Johan                                 | Korea (Republic)                    | 201615238684                       |
| (74) ir. A. Blokland c.s.                   | Korea (Republic)                    | 20160117413                        |
| (31) 201762482524 P                         | Korea (Republic)                    | (32) 16.09.2015                    |
| (32) 06.04.2017                             | Korea (Republic)                    | 25.09.2015                         |
| (33) United States of America               | (47) 02.06.2021                     | 05.11.2015                         |
| (47) 02.06.2021                             | (51) H04J 3/06                      | 16.08.2016                         |
| (51) H04B 7/08                              | H04L 7/00                           | 12.09.2016                         |
| H04W 88/06                                  | H04W 56/00                          | (33) United States of America      |
| (11) EP3258617                              | (11) EP3172925                      | United States of America           |
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| (22) 10.04.2015                             | (22) 29.06.2015                     | United States of America           |
| (54) ANTENNA CONFIGURATION METHOD           | (54) MONITORING PERIODS FOR DEVICE- | Korea (Republic)                   |
| AND TERMINAL                                | TO-DEVICE SYNCHRONIZATION           | (47) 28.04.2021                    |
| (73) Huawei Technologies Co., Ltd.          | SIGNALS                             | (51) H04L 1/00                     |
| (72) LAN, Yuan-Hao                          | (73) Qualcomm Incorporated          | H04L 5/00                          |
| HUANG, Chien-Jen                            | (72) ABEDINI, Navid                 | H04L 27/36                         |
| LUNG, Hsingyu                               | TAVILDAR, Saurabha, Rangrao         | H04L 29/06                         |
| SHU, Haw-Wei                                | GULATI, Kapil                       | (11) EP3577874                     |
| (74) dr. W.A.H.M. Van Borm                  | BAGHEL, Sudhir, Kumar               | (21) EP17932502.2                  |
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| (51) H04B 7/12                              | (31) 201462027124 P                 | (54) METHODS, APPARATUS AND        |
| H04L 1/08                                   | 201514752089                        | SYSTEMS FOR DETERMINING A          |
| H04L 5/00                                   | (32) 21.07.2014                     | TRANSPORT BLOCK SIZE IN A          |
| (11) EP3376702                              | 26.06.2015                          | WIRELESS COMMUNICATION             |
| (21) EP18152897.7                           | (33) United States of America       | (73) ZTE Corporation               |
| (22) 23.01.2018                             | United States of America            | (72) GUO, Qiujin                   |
| (54) METHOD AND APPARATUS FOR               | (47) 09.06.2021                     | XU, Jun                            |
| TRANSMITTING DUPLICATION DATA               | (51) H04L 1/00                      | XU, Jin                            |
| USING MULTIPLE CARRIERS                     | H04L 1/18                           | (74) ir. A.R. Aalbers              |
| (73) HTC Corporation                        | H04L 5/00                           | (47) 12.05.2021                    |
| (72) YE, Shiang-Rung                        | H04W 72/04                          | (51) H04L 1/00                     |
| (74) ir. M.F.J.M. Ketelaars c.s.            | (11) EP3270534                      | H04L 5/00                          |
| (31) 201762471935 P                         | (21) EP17180923.9                   | H04W 52/34                         |
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| (32) 15.03.2017                             | (54) METHOD AND APPARATUS FOR       | (21) EP16776862.1                  |
| 15.01.2018                                  | ALLOWING DIFFERENT SERVICES TO      | (22) 06.04.2016                    |
| (33) United States of America               | COEXIST IN WIRELESS CELLULAR        | (54) TRANSMISSION POWER CONTROL    |
| United States of America                    | COMMUNICATION SYSTEM                | FOR AN UPLINK CONTROL CHANNEL      |
| (47) 19.05.2021                             | (73) Samsung Electronics Co., Ltd.  | (73) Samsung Electronics Co., Ltd. |
| (51) H04B 7/15                              | (72) Yeo, Jeongho                   | (72) PAPASAKELLARIOU, Aris         |
| H04B 7/155                                  | Kim, Youngbum                       | (74) ir. M.F.J.M. Ketelaars c.s.   |
| H04L 5/00                                   | Kim, Younsun                        | (31) 201562143603 P                |
| (11) EP2342942                              | Oh, Jinyoung                        | 201562172946 P                     |
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| (22) 29.09.2009                             | (31) 20160088807                    | 201615089314                       |
| (54) APPARATUS AND METHOD FOR               | (32) 13.07.2016                     | (32) 06.04.2015                    |
| TRANSMITTING AND RECEIVING                  | (33) Korea (Republic)               | 09.06.2015                         |
| DATA IN WIRELESS COMMUNICATION              | (47) 02.06.2021                     | 10.07.2015                         |
| SYSTEM USING RELAY                          | (51) H04L 1/00                      | 01.04.2016                         |
| (73) Electronics and Telecommunications     | H04L 5/00                           | (33) United States of America      |
| Research Institute                          | H04B 7/0456                         | United States of America           |
| (72) LEE, Heesoo                            | (11) EP3348016                      | United States of America           |
| AHN, Jae Young                              | (21) EP16846870.0                   | United States of America           |
| KIM, Jae Heung                              | (22) 13.09.2016                     | (47) 02.06.2021                    |
| KO, Young Jo                                | (54) SIGNALING METHODS AND          | (51) H04L 1/00                     |
| LEE, Kyoung Seok                            | APPARATUS FOR ADVANCED MIMO         | H04L 5/00                          |
| (74) ir. H.Th. van den Heuvel c.s.          | COMMUNICATION SYSTEMS               | H04W 72/04                         |
| (31) 20080095228                            | (73) Samsung Electronics Co., Ltd.  | (11) EP3625924                     |
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| (22) 21.08.2018                                | United States of America                    | (31) 201862712597 P                         |
| (54) METHOD AND APPARATUS FOR                  | (47) 05.05.2021                             | 201862714415 P                              |
| MULTIPLEXING HIGHER-RESOLUTION                 | (51) H04L 5/00                              | (32) 31.07.2018                             |
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| (73) Samsung Electronics Co., Ltd.             | (21) EP17715289.9                           | (33) United States of America               |
| (72) RAHMAN, Md. Saifur                        | (22) 16.03.2017                             | United States of America                    |
| ONGGOSANUSI, Eko                               | (54) NARROWBAND INTERNET OF                 | (47) 21.04.2021                             |
| GUO, Li                                        | THINGS RANDOM ACCESS CHANNEL                | (51) H04L 5/00                              |
| (74) ir. M.F.J.M. Ketelaars c.s.               | CONFIGURATION DESIGN                        | H04W 24/10                                  |
| (31) 201762548222 P                            | (73) Telefonaktiebolaget LM Ericsson (PUBL) | H04W 48/12                                  |
| 201762556711 P                                 | (72) LIN, Xingqin                           | H04W 56/00                                  |
| 201762557320 P                                 | WANG, Yi-Pin Eric                           | (11) EP3580956                              |
| 201762558120 P                                 | BLANKENSHIP, Yufei                          | (21) EP18701567.2                           |
| 201762559322 P                                 | ADHIKARY, Ansuman                           | (22) 03.01.2018                             |
| 201762559961 P                                 | GRÖVLEN, Asbjörn                            | (54) METHODS FOR CONTROLLING                |
| 201762564612 P                                 | SUI, Yutao                                  | UE SYNCHRONIZATION AND CELL                 |
| 201762566916 P                                 | BERGMAN, Johan                              | IDENTIFICATION IN NR                        |
| 201762569765 P                                 | SHOKRI RAZAGHI, Hazhir                      | (73) Telefonaktiebolaget LM Ericsson (publ) |
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| 11.09.2017                                     | (51) H04L 5/00                              | (47) 19.05.2021                             |
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| 18.09.2017                                     | (54) REFERENCE SIGNAL TRANSMISSION          | H04W 48/18                                  |
| 28.09.2017                                     | METHOD AND APPARATUS                        | H04W 74/08                                  |
| 02.10.2017                                     | (73) Huawei Technologies Co., Ltd.          | (11) EP3567904                              |
| 09.10.2017                                     | (72) QIN, Yi                                | (21) EP17890515.4                           |
| 10.10.2017                                     | LI, Hua                                     | (22) 27.12.2017                             |
| 05.12.2017                                     | LI, Zhongfeng                               | (54) COMMUNICATION METHODS, AND             |
| 22.12.2017                                     | (74) ir. W.J.J.M. Kempes                    | TERMINAL DEVICE AND NETWORK                 |
| 17.08.2018                                     | (31) 201710011019                           | DEVICE IMPLEMENTING SAME                    |
| (33) United States of America                  | (32) 06.01.2017                             | (73) Huawei Technologies Co., Ltd.          |
| United States of America                       | (33) China                                  | (72) WANG, Tingting                         |
| United States of America                       | (47) 14.04.2021                             | ZENG, Qinghai                               |
| United States of America                       | (51) H04L 5/00                              | GUO, Yi                                     |
| United States of America                       | H04B 7/0413                                 | (74) ir. W.J.J.M. Kempes                    |
| United States of America                       | (11) EP3688880                              | (31) 201710005557                           |
| United States of America                       | (21) EP18860040.7                           | (32) 04.01.2017                             |
| United States of America                       | (22) 27.09.2018                             | (33) China                                  |
| United States of America                       | (54) DOWNLINK PILOT ASSIGNMENT IN           | (47) 21.04.2021                             |
| United States of America                       | MASSIVE MIMO                                | (51) H04L 5/00                              |
| United States of America                       | (73) Telefonaktiebolaget LM Ericsson (Publ) | H04W 72/00                                  |
| United States of America                       | (72) INTERDONATO, Giovanni                  | (11) EP3257183                              |
| United States of America                       | FRENGER, Pål                                | (21) EP15707012.9                           |
| United States of America                       | LARSSON, Erik G                             | (22) 12.02.2015                             |
| (47) 19.05.2021                                | (74) ir. A. Blokland c.s.                   | (54) CELLULAR AND WLAN AGGREGATION          |
| (51) H04L 1/00                                 | (31) 201762563704 P                         | (73) Nokia Technologies Oy                  |
| H04W 74/08                                     | (32) 27.09.2017                             | (72) KOSKELA, Jarkko, Tuomo                 |
| (11) EP3602874                                 | (33) United States of America               | KOSKINEN, Jussi-Pekka                       |
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| (22) 27.03.2018                                | (51) H04L 5/00                              | (47) 16.06.2021                             |
| (54) CODING SCHEME AND EXTENDED                | H04L 27/00                                  | (51) H04L 5/00                              |
| SYNCHRONIZATION ACCESS BURST                   | H04W 72/04                                  | H04W 72/00                                  |
| FOR EC-GSM-IOT ENHANCEMENT                     | (11) EP3606243                              | (11) EP3528563                              |
| (73) Telefonaktiebolaget LM Ericsson (PUBL)    | (21) EP19189289.2                           | (21) EP16921895.5                           |
| (72) LIN, Zhipeng                              | (22) 31.07.2019                             | (22) 16.11.2016                             |
| DIACHINA, John                                 | (54) METHOD AND APPARATUS FOR               | (54) UPLINK SIGNAL TRANSMISSION             |
| ERIKSSON LÖWENMARK, Stefan                     | INDICATING SLOT FORMAT OF AN                | METHOD AND DEVICE                           |
| JOHANSSON, Nicklas                             | UNLICENSED CELL IN A WIRELESS               | (73) GUANGDONG OPPO MOBILE                  |
| (74) ir. A. Blokland c.s.                      | COMMUNICATION SYSTEM                        | TELECOMMUNICATIONS CORP., LTD.              |
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| (32) 27.03.2017                                | LIU, Jia-Hong                               | TANG, Hai                                   |
| 27.03.2017                                     | (74) dr. ir. G.J.C. Verdijk c.s.            | (74) ir. W.J.J.M. Kempes                    |
| (33) World Intellectual Property Office (WIPO) |                                             |                                             |

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| (47) 12.05.2021                             | SAHLIN, Bengt                            | H04W 4/24                          |
| (51) H04L 5/00                              | NORRMAN, Karl                            | (11) EP3503604                     |
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| (22) 19.10.2018                             | (32) 27.02.2015                          | IMPROVING SERVICE EFFICIENCY IN    |
| (54) RESOURCE INDICATION METHOD,            | (33) United States of America            | WIRELESS COMMUNICATION SYSTEM      |
| TERMINAL DEVICE, AND NETWORK                | (47) 02.06.2021                          | (73) Samsung Electronics Co., Ltd. |
| DEVICE                                      | (51) H04L 9/08                           | (72) Jeong, Sangsoo                |
| (73) Huawei Technologies Co., Ltd.          | H04L 9/32                                | Cho, Songyeon                      |
| (72) REN, Xiang                             | H04L 29/06                               | Kim, Hyejeong                      |
| LIU, Yong                                   | H04L 29/12                               | (74) ir. M.F.J.M. Ketelaars c.s.   |
| GE, Shibin                                  | (11) EP3576374                           | (31) 20130090381                   |
| BI, Xiaoyan                                 | (21) EP19187555.8                        | 20130116853                        |
| (74) ir. W.J.J.M. Kempes                    | (22) 21.01.2003                          | 20130135863                        |
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| (32) 12.01.2018                             | A MESSAGE THROUGH A SECURE               | (32) 30.07.2013                    |
| (33) China                                  | CONNECTION                               | 30.09.2013                         |
| (47) 28.04.2021                             | (73) MPH Technologies Oy                 | 08.11.2013                         |
| (51) H04L 9/00                              | (72) Nuopponen, Antti                    | 10.01.2014                         |
| H04L 9/08                                   | Vaarala, Sami                            | (33) Korea (Republic)              |
| (11) EP3410630                              | (74) ir. A.R. Aalbers                    | Korea (Republic)                   |
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| (54) GENERAL DATA PROTECTION                | (33) Finland                             | (47) 26.05.2021                    |
| METHOD FOR MULTICENTRIC                     | (47) 28.04.2021                          | (51) H04L 12/26                    |
| SENSITIVE DATA STORAGE AND                  | (51) H04L 9/12                           | H04L 29/08                         |
| SHARING                                     | H04L 29/06                               | H04W 56/00                         |
| (73) BE-Invest International SA             | H04W 12/02                               | H04W 64/00                         |
| (72) CAREDDA, Laurent                       | H04W 12/12                               | G01S 5/02                          |
| SCHOEFFLER, Benoit                          | (11) EP3127309                           | G01S 19/48                         |
| MANSET, David                               | (21) EP15772432.9                        | H04B 17/27                         |
| KOSCINA BOBADILLA, Mirko Zvonimir           | (22) 30.03.2015                          | H04B 17/318                        |
| (74) dr. A. Krebs                           | (54) TRANSMISSION OF BEACON              | H04B 17/364                        |
| (47) 21.04.2021                             | MESSAGE                                  | H04W 4/02                          |
| (51) H04L 9/08                              | (73) Advanced New Technologies Co., Ltd. | H04W 4/70                          |
| H04L 9/32                                   | (72) QIN, Jian                           | (11) EP3535993                     |
| G06Q 20/40                                  | (74) J.M.H. Duyver lic.                  | (21) EP18807481.9                  |
| G06F 16/00                                  | (31) 201410136738                        | (22) 29.10.2018                    |
| G06F 16/23                                  | (32) 04.04.2014                          | (54) METHOD AND SYSTEM FOR         |
| (11) EP3552167                              | (33) China                               | MONITORING A MOBILE ASSET          |
| (21) EP18865364.6                           | (47) 12.05.2021                          | (73) Tionesta, LLC                 |
| (22) 30.11.2018                             | (51) H04L 9/32                           | (72) STRUHSACKER, Paul             |
| (54) UTILIZING NONCE TABLE                  | G06F 21/31                               | CIANOS, Nicholas                   |
| TO RESOLVE CONCURRENT                       | G06F 21/36                               | LI, Chenchen, Jimmy                |
| BLOCKCHAIN TRANSACTION FAILURE              | (11) EP3554000                           | (74) dr. ir. G.J.C. Verdijk c.s.   |
| (73) Advanced New Technologies Co., Ltd.    | (21) EP17879427.7                        | (31) 201715799299                  |
| (72) SHEN, Chao                             | (22) 29.11.2017                          | (32) 31.10.2017                    |
| SHAO, Kailai                                | (54) VALIDATION CODE BASED               | (33) United States of America      |
| LU, Xuming                                  | VERIFICATION METHOD AND DEVICE           | (47) 21.04.2021                    |
| (74) ir. W.J.J.M. Kempes                    | (73) Advanced New Technologies Co., Ltd. | (51) H04L 12/70                    |
| (47) 05.05.2021                             | (72) XIU, Chao                           | H04L 12/851                        |
| (51) H04L 9/08                              | WANG, Lei                                | H04L 12/863                        |
| H04L 9/32                                   | CHEN, Xing                               | (11) EP3412007                     |
| H04L 29/06                                  | LI, Chuazhi                              | (21) EP17765889.5                  |
| G06F 21/60                                  | ZHANG, Yongzhi                           | (22) 20.03.2017                    |
| H04W 12/04                                  | (74) ir. W.J.J.M. Kempes                 | (54) METHOD AND APPARATUS FOR      |
| H04W 12/06                                  | (31) 201611125263                        | PROGRAMMABLE BUFFERS IN            |
| H04W 12/10                                  | (32) 08.12.2016                          | MOBILE NETWORKS                    |
| (11) EP3262861                              | (33) China                               | (73) Huawei Technologies Co., Ltd. |
| (21) EP15883516.5                           | (47) 19.05.2021                          | (72) KOZAT, Ulas Can               |
| (22) 13.07.2015                             | (51) H04L 12/14                          | RAMCHANDRAN, Prakash               |
| (54) SECURITY ARRANGEMENTS IN               | H04M 15/00                               | JOHN, Kaippallimalil Mathew        |
| COMMUNICATION BETWEEN A                     | H04W 4/16                                | (74) dr. W.A.H.M. Van Borm         |
| COMMUNICATION DEVICE AND A                  | H04W 8/02                                | (31) 201662310363 P                |
| NETWORK DEVICE                              | H04W 36/34                               | 201715462560                       |
| (73) Telefonaktiebolaget LM Ericsson (publ) | H04W 40/24                               | (32) 18.03.2016                    |
| (72) NÄSLUND, Mats                          | H04W 48/18                               | 17.03.2017                         |

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (33) United States of America<br>United States of America<br>(47) 02.06.2021                                                                                                                                                                                                                                                                                                                        | (47) 12.05.2021<br>(51) H04L 29/06<br>H04W 8/06                                                                                                                                                                                                                                                                                                                                                                                                      | MADAPPA, Satish Chandra<br>(74) ir. W.J.J.M. Kempes<br>(31) 201815954893                                                                                                                                                                                                                                                                                                                                                         |
| (51) H04L 12/703<br>H04L 12/707<br>H04L 12/709<br>H04L 12/939<br>(11) EP3525405<br>(21) EP19156337.8<br>(22) 11.02.2019<br>(54) PACKET SENDING METHOD AND<br>NETWORK DEVICE<br>(73) HUAWEI TECHNOLOGIES CO., LTD.<br>(72) Ji, Lingling<br>Li, Jiuyong<br>(74) ir. W.J.J.M. Kempes<br>(31) 201810140153<br>(32) 11.02.2018<br>(33) China<br>(47) 21.04.2021                                          | (11) EP2974216<br>(21) EP14723559.2<br>(22) 14.03.2014<br>(54) METHOD AND COMPUTER READABLE<br>MEDIUM FOR ROUTING SESSION<br>CONTROL MESSAGES FOR VOICE<br>OVER LTE<br>(73) iBasis, Inc.<br>(72) XU, Richard, H.<br>TANG, Hwan, Jang<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 201361793404 P<br>(32) 15.03.2013<br>(33) United States of America<br>(47) 05.05.2021                                                                               | (32) 17.04.2018<br>(33) United States of America<br>(47) 16.06.2021                                                                                                                                                                                                                                                                                                                                                              |
| (51) H04L 12/931<br>(11) EP3085040<br>(21) EP14827622.3<br>(22) 16.12.2014<br>(54) RF MEMS BASED LARGE SCALE<br>CROSS POINT ELECTRICAL SWITCH<br>(73) Google LLC<br>(72) BANNON, Roy Michael<br>NOUJEIM, Leesa Marie<br>(74) ir. H.Th. van den Heuvel c.s.<br>(31) 201314134373<br>(32) 19.12.2013<br>(33) United States of America<br>(47) 05.05.2021                                              | (51) H04L 29/06<br>H04W 76/20<br>(11) EP3522670<br>(21) EP16918809.1<br>(22) 10.10.2016<br>(54) COMMUNICATION METHOD,<br>SECURITY NODE NETWORK<br>ELEMENT, AND TERMINAL<br>(73) Huawei Technologies Co., Ltd.<br>(72) ZHU, Hualin<br>LI, Huan<br>JIN, Weisheng<br>(74) dr. W.A.H.M. Van Borm<br>(47) 02.06.2021                                                                                                                                      | (51) H04L 29/08<br>H04W 4/70<br>(11) EP3586527<br>(21) EP17707791.4<br>(22) 22.02.2017<br>(54) FIRST COMMUNICATION DEVICE,<br>NETWORK DEVICE AND METHODS<br>THEREIN FOR IDENTIFYING AT LEAST<br>ONE SECOND COMMUNICATION<br>DEVICE PROVIDING A SEMANTIC<br>REPRESENTATION<br>(73) Telefonaktiebolaget LM Ericsson (Publ)<br>(72) OCAK, Mert<br>BEIJAR, Nicklas<br>JIMÉNEZ, Jaime<br>(74) ir. A. Blokland c.s.<br>(47) 07.04.2021 |
| (51) H04L 29/06<br>H04W 21/31<br>G06F 21/35<br>G06F 21/45<br>G06F 21/60<br>G06F 21/62<br>(11) EP3552131<br>(21) EP18706041.3<br>(22) 02.02.2018<br>(54) PASSWORD SECURITY<br>(73) Microsoft Technology Licensing, LLC<br>(72) ZHU, Liqiang<br>ZENG, Yi<br>HUANG, Yu<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 201715428848<br>(32) 09.02.2017<br>(33) United States of America<br>(47) 02.06.2021 | (51) H04L 29/08<br>H04W 4/06<br>H04W 4/08<br>H04W 76/00<br>(11) EP3281424<br>(21) EP16776923.1<br>(22) 08.04.2016<br>(54) METHODS AND APPARATUSES<br>FOR TRANSMITTING GROUP<br>COMMUNICATION SERVICE DATA<br>(73) Samsung Electronics Co., Ltd.<br>(72) WANG, Hong<br>XU, Lixiang<br>KE, Xiaowan<br>(74) ir. M.F.J.M. Ketelaars c.s.<br>(31) 201510166109<br>201510170353<br>(32) 09.04.2015<br>10.04.2015<br>(33) China<br>China<br>(47) 02.06.2021 | (72) CHEN, Jia<br>(74) ir. W.J.J.M. Kempes<br>(31) 201822002804 U<br>(32) 30.11.2018<br>(33) China<br>(47) 05.05.2021                                                                                                                                                                                                                                                                                                            |
| (51) H04L 29/06<br>H04W 4/08<br>H04W 4/10<br>(11) EP3300399<br>(21) EP15896670.5<br>(22) 29.06.2015<br>(54) FLOOR CONTROL METHOD,<br>APPARATUS AND SYSTEM FOR<br>MULTIPLE MCPTT SYSTEMS<br>(73) Huawei Technologies Co., Ltd.<br>(72) YANG, Yanmei<br>GE, Cuili<br>AMOGH, Niranth<br>(74) ir. W.J.J.M. Kempes                                                                                       | (51) H04L 29/08<br>H04W 4/70<br>(11) EP3557848<br>(21) EP19168547.8<br>(22) 10.04.2019<br>(54) A METHOD OF INTEGRATING WIRED<br>AND WIRELESS TANK GAUGING<br>SYSTEMS ON FLEXIBLE COMMON<br>GATEWAY HARDWARE<br>(73) Honeywell International Inc.<br>(72) RUDRARAJU, Sandeep<br>KUMAR, Krishna Praveen Ranjith<br>SAMUDRALA, Prasad<br>INGLE, Vilas Ramdas                                                                                            | (51) H04N 5/225<br>H04N 5/232<br>G02B 7/02<br>G02B 7/04<br>G03B 3/10<br>G03B 5/02<br>G03B 17/02<br>G03B 17/17<br>(11) EP3552050<br>(21) EP18897859.7<br>(22) 17.12.2018<br>(54) REDUCED HEIGHT PENALTY FOR<br>FOLDED CAMERA<br>(73) Corephotonics Ltd.<br>(72) BARAK, Gal<br>YEDID, Itay<br>GOLDENBERG, Ephraim<br>(74) ir. W.J.J.M. Kempes<br>(31) 201862626306 P<br>201862658819 P<br>201862672754 P                           |

|                                                        |                                                                                         |                                                                                                                                                |
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| 201862677012 P                                         | (54) DISPLAY APPARATUS AND CONTROL SYSTEM AND METHOD FOR SAME                           | (72) LIN, Jian-Liang                                                                                                                           |
| (32) 05.02.2018                                        | (73) Samsung Electronics Co., Ltd.                                                      | TSAI, Yu-Pao                                                                                                                                   |
| 17.04.2018                                             | (72) KEUM, Kun-Ho                                                                       | CHEN, Yi-Wen                                                                                                                                   |
| 17.05.2018                                             | KIM, Min Sup                                                                            | HUANG, Yu-Wen                                                                                                                                  |
| 27.05.2018                                             | LEE, Myoung Jun                                                                         | LEI, Shaw-Min                                                                                                                                  |
| (33) United States of America                          | LEE, Jong Keun                                                                          | (74) ir. A.R. Aalbers                                                                                                                          |
| United States of America                               | JO, Kyu Jung                                                                            | (31) 417798 P                                                                                                                                  |
| United States of America                               | KIM, Kwan Young                                                                         | 201161431454 P                                                                                                                                 |
| United States of America                               | YUN, Hyun-Kyu                                                                           | 201161452541 P                                                                                                                                 |
| (47) 02.06.2021                                        | (74) ir. M.F.J.M. Ketelaars c.s.                                                        | 201113089233                                                                                                                                   |
| (51) H04N 5/353                                        | (31) 20140132521                                                                        | 201113206891                                                                                                                                   |
| H04N 5/361                                             | (32) 01.10.2014                                                                         | (32) 29.11.2010                                                                                                                                |
| A61B 1/00                                              | (33) Korea (Republic)                                                                   | 11.01.2011                                                                                                                                     |
| A61B 1/045                                             | (47) 07.04.2021                                                                         | 14.03.2011                                                                                                                                     |
| A61B 1/05                                              | (51) H04N 19/119                                                                        | 18.04.2011                                                                                                                                     |
| A61B 1/06                                              | H04N 19/172                                                                             | 10.08.2011                                                                                                                                     |
| A61B 1/07                                              | H04N 19/176                                                                             | (33) United States of America                                                                                                                  |
| G02B 23/24                                             | H04N 19/46                                                                              | United States of America                                                                                                                       |
| H04N 5/225                                             | H04N 19/70                                                                              | United States of America                                                                                                                       |
| H04N 5/235                                             | (11) EP3446483                                                                          | United States of America                                                                                                                       |
| H04N 9/04                                              | (21) EP17729289.3                                                                       | United States of America                                                                                                                       |
| (11) EP2877077                                         | (22) 25.05.2017                                                                         | (47) 05.05.2021                                                                                                                                |
| (21) EP13822177.5                                      | (54) BINARY, TERNARY AND QUAD TREE PARTITIONING FOR JVET CODING OF VIDEO DATA           | (51) H04N 21/2343                                                                                                                              |
| (22) 26.07.2013                                        | (73) ARRIS Enterprises LLC                                                              | (11) EP3434021                                                                                                                                 |
| (54) CONTINUOUS VIDEO IN A LIGHT DEFICIENT ENVIRONMENT | (72) PANUSOPONE, Krit                                                                   | (21) EP17709721.9                                                                                                                              |
| (73) DePuy Synthes Products, Inc.                      | HONG, Seungwook                                                                         | (22) 14.03.2017                                                                                                                                |
| (72) BLANQUART, Laurent                                | YU, Yue                                                                                 | (54) METHOD, APPARATUS AND STREAM OF FORMATTING AN IMMERSIVE VIDEO FOR LEGACY AND IMMERSIVE RENDERING DEVICES                                  |
| TALBERT, Joshua, D.                                    | WANG, Limin                                                                             | (73) InterDigital VC Holdings, Inc.                                                                                                            |
| WICHERN, Donald, M.                                    | (74) ir. J.D. de Zeeuw                                                                  | (72) DORE, Renaud                                                                                                                              |
| RICHARDSON, John                                       | (31) 201662341325 P                                                                     | FLEUREAU, Julien                                                                                                                               |
| HENLEY, Jeremiah, D.                                   | 201662408696 P                                                                          | TAPIE, Thierry                                                                                                                                 |
| (74) ir. H.Th. van den Heuvel c.s.                     | 201662414060 P                                                                          | (74) ir. M.F.J.M. Ketelaars c.s.                                                                                                               |
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| (32) 26.07.2012                                        | 28.10.2016                                                                              | (33) European Patent Office (EPO)                                                                                                              |
| 15.03.2013                                             | (33) United States of America                                                           | (47) 05.05.2021                                                                                                                                |
| (33) United States of America                          | United States of America                                                                | (51) H04N 21/2343                                                                                                                              |
| United States of America                               | United States of America                                                                | H04N 21/235                                                                                                                                    |
| (47) 26.05.2021                                        | (47) 21.04.2021                                                                         | H04N 21/435                                                                                                                                    |
| (51) H04N 5/3745                                       | (51) H04N 19/30                                                                         | H04N 21/4402                                                                                                                                   |
| H01L 27/146                                            | H04N 19/46                                                                              | H04L 29/06                                                                                                                                     |
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| (22) 17.07.2013                                        | (21) EP13856204.6                                                                       | (21) EP15709680.1                                                                                                                              |
| (54) IMAGING SENSOR DEVICE                             | (22) 20.11.2013                                                                         | (22) 12.03.2015                                                                                                                                |
| (73) United Kingdom Research and Innovation            | (54) SIGNALING SCALABILITY INFORMATION IN A PARAMETER SET                               | (54) METHOD FOR OPERATING A CACHE ARRANGED ALONG A TRANSMISSION PATH BETWEEN CLIENT TERMINALS AND AT LEAST ONE SERVER, AND CORRESPONDING CACHE |
| (72) GUERRINI, Nicola                                  | (73) Dolby International AB                                                             | (73) InterDigital CE Patent Holdings                                                                                                           |
| SEDGWICK, Iain                                         | (72) DESHPANDE, Sachin G.                                                               | (72) GOUACHE, Stéphane                                                                                                                         |
| TURCHETTA, Renato                                      | (74) J.M.H. Duyver lic.                                                                 | HOUDAILLE, Rémi                                                                                                                                |
| (74) ir. M.F.J.M. Ketelaars c.s.                       | (31) 201261728997 P                                                                     | TAIBI, Charline                                                                                                                                |
| (31) 201212769                                         | 201361749173 P                                                                          | (74) ir. M.F.J.M. Ketelaars c.s.                                                                                                               |
| (32) 18.07.2012                                        | (32) 21.11.2012                                                                         | (31) 14305393                                                                                                                                  |
| (33) United Kingdom                                    | 04.01.2013                                                                              | (32) 20.03.2014                                                                                                                                |
| (47) 05.05.2021                                        | (33) United States of America                                                           | (33) European Patent Office (EPO)                                                                                                              |
| (51) H04N 5/44                                         | United States of America                                                                | (47) 05.05.2021                                                                                                                                |
| H04N 21/41                                             | (47) 26.05.2021                                                                         | (51) H04N 21/235                                                                                                                               |
| H04N 21/422                                            | (51) H04N 19/52                                                                         | H04L 29/06                                                                                                                                     |
| H04N 21/436                                            | (11) EP2647206                                                                          | H04L 29/08                                                                                                                                     |
| H04N 21/4363                                           | (21) EP11845162.4                                                                       | H04L 12/741                                                                                                                                    |
| G08C 17/02                                             | (22) 13.10.2011                                                                         | (11) EP3588909                                                                                                                                 |
| H04W 4/80                                              | (54) METHOD AND APPARATUS FOR DERIVATION OF MV/MVP CANDIDATE FOR INTER/SKIP/MERGE MODES | (21) EP19191882.0                                                                                                                              |
| H04W 76/11                                             | (73) HFI Innovation Inc.                                                                |                                                                                                                                                |
| H04W 76/14                                             |                                                                                         |                                                                                                                                                |
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| (22) 04.11.2015                                                                     | (51) H04R 1/10                                                                                                 | (47) 05.05.2021                                                                                |
| (54) TRANSMITTING APPARATUS,<br>RECEIVING APPARATUS AND<br>RECEIVING METHOD THEREOF | (11) EP2737720                                                                                                 | (51) H04W 8/02                                                                                 |
| (73) Samsung Electronics Co., Ltd.                                                  | (21) EP12741458.9                                                                                              | H04W 8/30                                                                                      |
| (72) YANG, Hyun-Koo                                                                 | (22) 24.07.2012                                                                                                | H04W 24/04                                                                                     |
| HWANG, Sung-Hee                                                                     | (54) EARPIECE PASSIVE NOISE<br>ATTENUATING                                                                     | H04W 88/16                                                                                     |
| (74) ir. M.F.J.M. Ketelaars c.s.                                                    | (73) Bose Corporation                                                                                          | H04W 76/22                                                                                     |
| (31) 201462074759 P                                                                 | (72) MONAHAN, Michael                                                                                          | (11) EP3509337                                                                                 |
| 201462083971 P                                                                      | SILVESTRI, Ryan C.                                                                                             | (21) EP19152306.7                                                                              |
| 20150114331                                                                         | WALLACE, Eric M.                                                                                               | (22) 22.06.2016                                                                                |
| (32) 04.11.2014                                                                     | ANNUNZIATO, Kevin P.                                                                                           | (54) A NODE AND METHOD FOR<br>MANAGING A PACKET DATA<br>NETWORK CONNECTION                     |
| 25.11.2014                                                                          | (74) ir. W.J.J.M. Kempes                                                                                       | (73) Telefonaktiebolaget LM Ericsson (publ)                                                    |
| 13.08.2015                                                                          | (31) 201113193288                                                                                              | (72) YANG, Yong                                                                                |
| (33) United States of America                                                       | (32) 28.07.2011                                                                                                | (74) ir. A. Blokland c.s.                                                                      |
| United States of America                                                            | (33) United States of America                                                                                  | (31) 201562205047 P                                                                            |
| Korea (Republic)                                                                    | (47) 14.04.2021                                                                                                | (32) 14.08.2015                                                                                |
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| (11) EP2829058                                                                      | (21) EP19211475.9                                                                                              | H04W 74/08                                                                                     |
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| (22) 20.03.2013                                                                     | (54) RE-ESTABLISHING A RADIO<br>RESOURCE CONTROL CONNECTION                                                    | (11) EP3520528                                                                                 |
| (54) NON-CLOSED CAPTION DATA<br>TRANSPORT IN STANDARD CAPTION<br>SERVICE            | (73) Telefonaktiebolaget LM Ericsson (publ)                                                                    | (21) EP16775678.2                                                                              |
| (73) Saturn Licensing LLC                                                           | (72) LEHTOVIRTA, Vesa                                                                                          | (22) 29.09.2016                                                                                |
| (72) EYER, Mark                                                                     | WIFVESSON, Monica                                                                                              | (54) COORDINATION OF SCHEDULED<br>AND CONTENTION-BASED UPLINK<br>TRANSMISSIONS                 |
| (74) ir. M.F.J.M. Ketelaars c.s.                                                    | NAKARMI, Prajwol Kumar                                                                                         | (73) Telefonaktiebolaget LM Ericsson (publ)                                                    |
| (31) 201261613869 P                                                                 | (74) ir. A. Blokland c.s.                                                                                      | (72) FODOR, Gabor                                                                              |
| (32) 21.03.2012                                                                     | (31) 201762450152 P                                                                                            | KAZMI, Muhammad                                                                                |
| (33) United States of America                                                       | (32) 25.01.2017                                                                                                | (74) ir. A. Blokland c.s.                                                                      |
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| (51) H04N 21/2383                                                                   | (47) 23.06.2021                                                                                                | (51) H04W 24/02                                                                                |
| H04N 21/61                                                                          | (51) H04W 4/90                                                                                                 | (11) EP3701740                                                                                 |
| H04H 20/95                                                                          | (11) EP3639539                                                                                                 | (21) EP17790753.2                                                                              |
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| (11) EP3410733                                                                      | (22) 08.08.2019                                                                                                | (54) RESOURCE MANAGEMENT IN CLOUD<br>RADIO ACCESS NETWORKS                                     |
| (21) EP17743955.1                                                                   | (54) PUBLIC WARNING MESSAGES OVER<br>N3GPP ACCESS                                                              | (73) Nokia Solutions and Networks Oy                                                           |
| (22) 13.01.2017                                                                     | (73) ICom GmbH & Co. KG                                                                                        | (72) SCHEFCZIK, Peter                                                                          |
| (54) DATA PROCESSING DEVICE AND<br>DATA PROCESSING METHOD                           | (72) SCHMIDT, Andreas                                                                                          | HABERLAND, Bernd                                                                               |
| (73) Sony Corporation                                                               | HANS, Martin                                                                                                   | KLOTSCHKE, Ralf                                                                                |
| (72) AMIMOTO, Tatsuki                                                               | LUFT, Achim                                                                                                    | (74) dr. W.A.H.M. Van Borm                                                                     |
| MICHAEL, Lachlan Bruce                                                              | BIENAS, Maik                                                                                                   | (47) 09.06.2021                                                                                |
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| H04N 19/182      | (51) A41D 3/00  |                 |
| H04N 19/593      | A41D 13/02      |                 |
| H04N 19/82       | (00) 37/20      |                 |
| (00) 02/21       | 09.09.2020      |                 |
| 13.01.2021       | (11) EP3556501  |                 |
| (11) EP3457807   | (51) B23F 1/02  |                 |
| (51) H04W 76/10  | B23F 5/04       |                 |
| H04W 76/27       | B23F 23/00      |                 |
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**VB2**

**Rechten waarvoor een beslissing is genomen op een verzoek- of bezwaarschrift conform de Octrooiwet 1995.**

**Contains data concerning requests and notices of opposition under the General administrative law in respect of which a decision has been taken or in respect for which a report has been made.**

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| A61L 9/16       | (11) EP2498762   | (51) H04B 1/707 |
| C08J 9/14       | (51) A61K 9/70   | H04J 13/20      |
| C09K 3/30       | A61K 31/381      | (00) 28/19      |
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| B01J 23/42      | A61K 31/35       | F16L 11/08      |
| B01J 29/40      | A61K 31/40       | F16L 11/12      |
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| F01N 3/20       | A61K 38/05       | (51) B29C 49/06 |
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| F26B 17/32                      | C11D 1/29       |
| (00) New licence registration   | C11D 1/66       |
| (11) EP1406976                  | C11D 1/72       |
| (51) C09C 1/56                  | C11D 1/83       |
| C09D 5/02                       | C11D 1/831      |
| C09D 7/12                       | C11D 3/20       |
| (11) EP1600801                  | C11D 17/04      |
| (51) G02B 6/44                  | (11) EP2995508  |
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| C10L 1/18                       |                 |
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## Verval of nietigverklaring.

## Contains data concerning lapse or annulment.

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| (11) EP3484949         |                        |
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| (00) EPV Ceased Effect |                        |
| (11) EP3494919         |                        |
| (00) 10.02.2021        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP3498447         |                        |
| (00) 10.02.2021        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP3498794         |                        |
| (00) 10.02.2021        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP3505322         |                        |
| (00) 10.02.2021        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP3554926         |                        |
| (00) 10.02.2021        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP3556026         |                        |
| (00) 10.02.2021        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP3557121         |                        |
| (00) 10.02.2021        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP3558758         |                        |
| (00) 10.02.2021        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP3558761         |                        |
| (00) 10.02.2021        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP3560176         |                        |
| (00) 10.02.2021        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP3562696         |                        |
| (00) 10.02.2021        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP3581689         |                        |
| (00) 10.02.2021        |                        |
| (00) EPV Ceased Effect |                        |
| (11) EP3585859         |                        |
| (00) 10.02.2021        |                        |

**VRB**

**Verbeteringen op eerdere publicaties.  
Contains data concerning corrections.**

(11) 2020761

(48) 07.07.2021

(00) Akte gedeeltelijke afstand ingeschreven

(51) E01C 3/06

E02D 31/08

E01B 19/00

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CO

Ingeschreven overdrachten.

Contains data concerning registered assignments or change of owners.

|                                                 |                                      |                                   |
|-------------------------------------------------|--------------------------------------|-----------------------------------|
| (71) Eaton Intelligent Power Limited            | (71) Amer-Sil sa                     | (00) Merge                        |
| (73) Eaton Intelligent Power Limited            | (73) Amer-Sil sa                     | (71) Veeco Instruments Inc.       |
| (11) EP1872842                                  | (11) EP3393639                       | (73) Veeco Instruments Inc.       |
| (00) 30.06.2021                                 | (00) 30.06.2021                      | (11) EP2161352                    |
| (51) B01D 29/68                                 | (51) B01D 69/06                      | (00) 25.06.2021                   |
| B01D 29/90                                      | B01D 69/10                           | (51) B01D 53/00                   |
| (00) Assignment                                 | B01D 69/14                           | B01D 53/04                        |
| (71) Mechanisatiebedrijf Van Dijke Zeeland B.V. | B01D 71/30                           | C23C 16/44                        |
| (73) Mechanisatiebedrijf Van Dijke Zeeland B.V. | (00) Assignment                      | C23C 16/455                       |
| (11) 1031590                                    | (71) Eaton Intelligent Power Limited | (00) Assignment                   |
| (00) 06.07.2021                                 | (73) Eaton Intelligent Power Limited | (71) Kao Corporation              |
| (51) A23N 12/02                                 | (11) EP2577697                       | (73) Kao Corporation              |
| B07B 1/12                                       | (00) 30.06.2021                      | (11) EP1944365                    |
| B07B 1/14                                       | (51) H02H 1/00                       | (00) 28.06.2021                   |
| B07B 13/07                                      | H02H 7/22                            | (51) C12N 1/21                    |
| (00) Change of owner(s) name                    | (00) Assignment                      | C12N 15/09                        |
| (71) Eaton Intelligent Power Limited            | (71) Ademco 2 GmbH                   | (00) Assignment                   |
| (73) Eaton Intelligent Power Limited            | (73) Ademco 2 GmbH                   | (71) SAL Heavy Lift GmbH & Co. KG |
| (11) EP1545737                                  | (11) EP3064937                       | (73) SAL Heavy Lift GmbH & Co. KG |
| (00) 30.06.2021                                 | (00) 01.07.2021                      | (11) EP2896589                    |
| (51) B01D 29/11                                 | (51) G01N 27/417                     | (00) 28.06.2021                   |
| B01D 29/23                                      | G01N 27/419                          | (51) B66C 13/02                   |
| B01D 29/27                                      | (00) Assignment                      | B66C 13/06                        |
| (00) Assignment                                 | (71) Eaton Intelligent Power Limited | B66C 23/00                        |
| (71) APN INC.                                   | (73) Eaton Intelligent Power Limited | B66C 23/52                        |
| (73) APN INC.                                   | (11) EP2777058                       | B66D 1/52                         |
| (11) EP1880131                                  | (00) 30.06.2021                      | (00) Change of Legal Entity       |
| (00) 01.07.2021                                 | (51) H01H 1/20                       | (71) Veeco Instruments Inc.       |
| (51) F16K 7/16                                  | H01H 9/44                            | (73) Veeco Instruments Inc.       |
| F16K 11/22                                      | H01H 9/46                            | (11) EP1771598                    |
| G01N 30/20                                      | (00) Assignment                      | (00) 25.06.2021                   |
| G01N 30/24                                      | (71) Eaton Intelligent Power Limited | (51) C23C 16/455                  |
| (00) Assignment                                 | (73) Eaton Intelligent Power Limited | (00) Assignment                   |
| (71) Eaton Intelligent Power Limited            | (11) EP3008740                       | (71) Heidelberger Druckmaschinen  |
| (73) Eaton Intelligent Power Limited            | (00) 30.06.2021                      | Intellectual Property AG & Co. KG |
| (11) EP2304294                                  | (51) H01H 1/62                       | (73) Heidelberger Druckmaschinen  |
| (00) 30.06.2021                                 | H01H 9/52                            | Intellectual Property AG & Co. KG |
| (51) F16L 11/127                                | H01H 33/66                           | (11) EP2087996                    |
| (00) Assignment                                 | H01H 33/664                          | (00) 25.06.2021                   |
| (71) Otsuka Pharmaceutical Co., Ltd.            | (00) Assignment                      | (51) B41F 1/54                    |
| (73) Otsuka Pharmaceutical Co., Ltd.            | (71) Surtek, Inc.                    | B41F 13/14                        |
| (11) EP3235491                                  | (73) Veeco Instruments Inc.          | B41F 13/24                        |
| (00) 01.07.2021                                 | (11) EP1771598                       | B41F 13/34                        |
| (51) A61B 5/00                                  | (00) 25.06.2021                      | B41F 19/02                        |
| A61B 5/07                                       | (51) C23C 16/455                     | B41F 19/06                        |
| A61K 9/00                                       | (00) Assignment                      | B41F 33/00                        |
| A61M 31/00                                      | (71) Cerdia International GmbH       | G01L 5/00                         |
| G06K 5/00                                       | (73) Cerdia International GmbH       | (00) Assignment                   |
| G08B 1/08                                       | (11) EP3183100                       | (71) ZIONEXA                      |
| G08B 13/14                                      | (00) 24.06.2021                      | (73) ZIONEXA                      |
| (00) Assignment                                 | (51) B27N 1/00                       | (11) EP2175888                    |
| (71) Eaton Intelligent Power Limited            | C07C 51/42                           | (00) 23.06.2021                   |
| (73) Eaton Intelligent Power Limited            | C07C 51/44                           | (51) A61K 51/06                   |
| (11) EP2909854                                  | C07C 57/08                           | A61K 51/12                        |
| (00) 30.06.2021                                 | C08H 8/00                            | A61K 103/10                       |
| (51) H01H 71/08                                 | (00) Assignment                      | A61P 35/00                        |
| H01H 71/12                                      | (71) Ultratech, Inc.                 | (00) Assignment                   |
| (00) Assignment                                 | (73) Veeco Instruments Inc.          | (71) G & W Electric Company       |
| (71) Amer-Sil sa                                | (11) EP1771598                       | (73) G & W Electric Company       |
| (73) Amer-Sil sa                                | (00) 25.06.2021                      | (11) EP2304446                    |
| (11) EP3393639                                  | (51) C23C 16/455                     | (00) 24.06.2021                   |
| (00) 30.06.2021                                 |                                      |                                   |
| (51) B01D 69/06                                 |                                      |                                   |
| B01D 69/10                                      |                                      |                                   |
| B01D 69/14                                      |                                      |                                   |
| B01D 71/30                                      |                                      |                                   |
| (00) Assignment                                 |                                      |                                   |
| (71) Eaton Intelligent Power Limited            |                                      |                                   |
| (73) Eaton Intelligent Power Limited            |                                      |                                   |
| (11) EP2577697                                  |                                      |                                   |
| (00) 30.06.2021                                 |                                      |                                   |
| (51) H02H 1/00                                  |                                      |                                   |
| H02H 7/22                                       |                                      |                                   |
| (00) Assignment                                 |                                      |                                   |
| (71) Ademco 2 GmbH                              |                                      |                                   |
| (73) Ademco 2 GmbH                              |                                      |                                   |
| (11) EP3064937                                  |                                      |                                   |
| (00) 01.07.2021                                 |                                      |                                   |
| (51) G01N 27/417                                |                                      |                                   |
| G01N 27/419                                     |                                      |                                   |
| (00) Assignment                                 |                                      |                                   |
| (71) Eaton Intelligent Power Limited            |                                      |                                   |
| (73) Eaton Intelligent Power Limited            |                                      |                                   |
| (11) EP2777058                                  |                                      |                                   |
| (00) 30.06.2021                                 |                                      |                                   |
| (51) H01H 1/20                                  |                                      |                                   |
| H01H 9/44                                       |                                      |                                   |
| H01H 9/46                                       |                                      |                                   |
| (00) Assignment                                 |                                      |                                   |
| (71) Eaton Intelligent Power Limited            |                                      |                                   |
| (73) Eaton Intelligent Power Limited            |                                      |                                   |
| (11) EP3008740                                  |                                      |                                   |
| (00) 30.06.2021                                 |                                      |                                   |
| (51) H01H 1/62                                  |                                      |                                   |
| H01H 9/52                                       |                                      |                                   |
| H01H 33/66                                      |                                      |                                   |
| H01H 33/664                                     |                                      |                                   |
| (00) Assignment                                 |                                      |                                   |
| (71) Surtek, Inc.                               |                                      |                                   |
| (73) Veeco Instruments Inc.                     |                                      |                                   |
| (11) EP1771598                                  |                                      |                                   |
| (00) 25.06.2021                                 |                                      |                                   |
| (51) C23C 16/455                                |                                      |                                   |
| (00) Assignment                                 |                                      |                                   |
| (71) Cerdia International GmbH                  |                                      |                                   |
| (73) Cerdia International GmbH                  |                                      |                                   |
| (11) EP3183100                                  |                                      |                                   |
| (00) 24.06.2021                                 |                                      |                                   |
| (51) B27N 1/00                                  |                                      |                                   |
| C07C 51/42                                      |                                      |                                   |
| C07C 51/44                                      |                                      |                                   |
| C07C 57/08                                      |                                      |                                   |
| C08H 8/00                                       |                                      |                                   |
| (00) Assignment                                 |                                      |                                   |
| (71) Ultratech, Inc.                            |                                      |                                   |
| (73) Veeco Instruments Inc.                     |                                      |                                   |
| (11) EP1771598                                  |                                      |                                   |
| (00) 25.06.2021                                 |                                      |                                   |
| (51) C23C 16/455                                |                                      |                                   |

|                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (51) G01R 15/16<br>H01B 17/00<br>(00) Assignment                                                                                                                                                                                                                                            | FUJITA Academy<br>(11) EP1865464<br>(00) 29.06.2021                                                                                                                                                                                                                                                                                                                                                                                                                                                | (11) EP2509999<br>(00) 29.06.2021<br>(51) A61K 39/395                                                                                                                                                                                                                                                                |
| (71) Institut National de la Santé et de la<br>Recherche Médicale<br>ZIONEXA<br>Universite d'Auvergne Clermont I                                                                                                                                                                            | (51) A61B 5/00<br>G06T 7/00<br>(00) Change of owner(s) name<br>(71) M.E.P. - MACCHINE ELETTRONICHE<br>PIEGATRICI - S.P.A.                                                                                                                                                                                                                                                                                                                                                                          | A61P 19/02<br>C07K 14/47<br>C07K 16/18<br>C07K 16/44<br>(00) Merge                                                                                                                                                                                                                                                   |
| (73) Institut National de la Santé et de la<br>Recherche Médicale<br>ZIONEXA<br>Universite d'Auvergne Clermont I                                                                                                                                                                            | (73) M.E.P. - MACCHINE ELETTRONICHE<br>PIEGATRICI - S.P.A.                                                                                                                                                                                                                                                                                                                                                                                                                                         | (71) Nanosil GmbH<br>(73) Nanosil GmbH                                                                                                                                                                                                                                                                               |
| (11) EP2841402<br>(00) 23.06.2021                                                                                                                                                                                                                                                           | (11) EP3057722<br>(00) 24.06.2021                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (11) EP2858139<br>(00) 29.06.2021                                                                                                                                                                                                                                                                                    |
| (51) C07B 59/00<br>C07D 241/44<br>C07D 403/12<br>C07F 7/22<br>(00) Assignment                                                                                                                                                                                                               | (51) B21D 11/12<br>B21F 1/00<br>(00) Assignment<br>(71) gym80 International GmbH<br>(73) gym80 International GmbH                                                                                                                                                                                                                                                                                                                                                                                  | (51) B01D 61/28<br>B01J 19/00<br>B29C 65/48<br>C09J 5/00<br>C25B 9/00<br>C25B 9/20                                                                                                                                                                                                                                   |
| (71) Kao Corporation<br>(73) Kao Corporation<br>(11) EP1829959<br>(00) 28.06.2021                                                                                                                                                                                                           | (11) EP1525033<br>(00) 25.06.2021<br>(51) A63B 21/06<br>(00) Assignment<br>(71) Canon Medical Systems Corporation<br>FUJITA Academy                                                                                                                                                                                                                                                                                                                                                                | F16B 11/00<br>F16J 15/00<br>F28F 3/00<br>F28F 3/10<br>H01H 50/00<br>H01M 2/08<br>H01M 8/0284<br>H01M 8/0286<br>H01M 8/0297                                                                                                                                                                                           |
| (51) C12N 1/15<br>C12N 1/19<br>C12N 1/21<br>C12N 9/56<br>C12N 15/09<br>C12P 21/02<br>(00) Assignment                                                                                                                                                                                        | (73) Canon Medical Systems Corporation<br>FUJITA Academy<br>(11) EP1865464<br>(00) 29.06.2021<br>(51) A61B 5/00<br>G06T 7/00<br>(00) Assignment                                                                                                                                                                                                                                                                                                                                                    | (00) Assignment<br>(71) Citryll IP B.V.<br>(73) Citryll B.V.                                                                                                                                                                                                                                                         |
| (71) G & W Electric Company<br>(73) G & W Electric Company<br>(11) EP3052946<br>(00) 24.06.2021                                                                                                                                                                                             | (71) Akzo Nobel Coatings International B.V.<br>(73) Akzo Nobel Coatings International B.V.<br>(11) EP2271689<br>(00) 29.06.2021                                                                                                                                                                                                                                                                                                                                                                    | (11) EP2509999<br>(00) 29.06.2021<br>(51) A61K 39/395<br>A61P 19/02<br>C07K 14/47<br>C07K 16/18<br>C07K 16/44                                                                                                                                                                                                        |
| (51) B29C 33/00<br>B29C 39/00<br>B29C 39/10<br>B29C 39/26<br>B29K 63/00<br>B29K 67/00<br>B29L 31/34<br>G01R 3/00<br>G01R 13/00<br>G01R 15/16<br>G01R 27/26<br>G01R 29/12<br>(00) Assignment                                                                                                 | (51) C08G 18/28<br>C08G 18/32<br>C08G 18/42<br>C08G 18/79<br>C08K 3/32<br>C09D 175/04<br>(00) Assignment<br>(71) Chr. Hansen HMO GmbH<br>(73) Chr. Hansen HMO GmbH<br>(11) EP2479263<br>(00) 28.06.2021<br>(51) C12N 9/10<br>C12P 19/18<br>C12P 21/00<br>(00) Change of owner(s) name<br>(71) Chr. Hansen HMO GmbH<br>(73) Chr. Hansen HMO GmbH<br>(11) EP2439264<br>(00) 28.06.2021<br>(51) C12N 9/10<br>(00) Change of owner(s) name<br>(71) Canon Medical Systems Corporation<br>FUJITA Academy | (00) Demerger<br>(71) Polyprocess GmbH<br>(73) Nanosil GmbH<br>(11) EP2858139<br>(00) 29.06.2021<br>(51) B01D 61/28<br>B01J 19/00<br>B29C 65/48<br>C09J 5/00<br>C25B 9/00<br>C25B 9/20<br>F16B 11/00<br>F16J 15/00<br>F28F 3/00<br>F28F 3/10<br>H01H 50/00<br>H01M 2/08<br>H01M 8/0284<br>H01M 8/0286<br>H01M 8/0297 |
| (71) Xnext S.p.A.<br>(73) Xnext S.p.A.<br>(11) EP2405260<br>(00) 29.06.2021<br>(51) G01N 23/087<br>G01N 23/10<br>G01T 1/24<br>G01V 5/00<br>G06T 5/40<br>G06T 5/50<br>(00) Change of Legal Entity                                                                                            | (51) C12N 9/10<br>C12P 19/18<br>C12P 21/00<br>(00) Change of owner(s) name<br>(71) Chr. Hansen HMO GmbH<br>(73) Chr. Hansen HMO GmbH<br>(11) EP2439264<br>(00) 28.06.2021<br>(51) C12N 9/10<br>(00) Change of owner(s) name<br>(71) Canon Medical Systems Corporation<br>FUJITA Academy                                                                                                                                                                                                            | (00) Change of owner(s) name<br>(71) Canon Medical Systems Corporation<br>National University Corporation Kobe<br>University<br>(73) Canon Medical Systems Corporation<br>FUJITA Academy                                                                                                                             |
| (71) Sonja van Winkelhof<br>(73) gym80 International GmbH<br>(11) EP1525033<br>(00) 25.06.2021<br>(51) A63B 21/06<br>(00) Change of owner(s) name<br>(71) Canon Medical Systems Corporation<br>National University Corporation Kobe<br>University<br>(73) Canon Medical Systems Corporation | (73) Canon Medical Systems Corporation<br>FUJITA Academy<br>(11) EP2982304<br>(00) 29.06.2021<br>(51) A61B 5/055<br>A61B 6/00<br>A61B 6/03<br>(00) Assignment<br>(71) Citryll B.V.<br>(73) Citryll B.V.                                                                                                                                                                                                                                                                                            | (00) Change of owner(s) name<br>(71) Canon Medical Systems Corporation<br>National University Corporation Kobe<br>University<br>(73) Canon Medical Systems Corporation<br>FUJITA Academy<br>(11) EP2982304<br>(00) 29.06.2021<br>(51) A61B 5/055<br>A61B 6/00<br>A61B 6/03                                           |



|                              |                               |                                |
|------------------------------|-------------------------------|--------------------------------|
| (00) Change of owner(s) name | (71) Apple Inc.               | A61K 45/06                     |
| (71) Citryll IP B.V.         | (73) Apple Inc.               | A61P 35/00                     |
| (73) Citryll B.V.            | (11) EP2868124                | A61P 37/04                     |
| (11) EP3229829               | (00) 28.06.2021               | A61P 43/00                     |
| (00) 29.06.2021              | (51) H04L 5/00                | C07K 16/22                     |
| (51) A61K 39/00              | H04W 4/08                     | C07K 16/28                     |
| A61P 29/00                   | H04W 72/00                    | C07K 16/30                     |
| C07K 16/18                   | H04W 72/04                    | C07K 16/44                     |
| C07K 16/44                   | (00) Assignment               | (00) Assignment                |
| (00) Demerger                | (71) Apple Inc.               | (71) FLD Technologies GmbH     |
| (71) Apple Inc.              | (73) Apple Inc.               | (73) FLD Technologies GmbH     |
| (73) Apple Inc.              | (11) EP2926588                | (11) EP3525918                 |
| (11) EP3123814               | (00) 28.06.2021               | (00) 29.06.2021                |
| (00) 28.06.2021              | (51) H04W 36/08               | (51) B01D 53/62                |
| (51) H04L 1/08               | H04W 72/12                    | B01D 53/86                     |
| H04W 8/00                    | H04B 17/24                    | C01B 3/24                      |
| H04W 24/02                   | H04B 17/26                    | C07C 1/04                      |
| H04W 72/04                   | H04B 17/345                   | C07C 1/12                      |
| H04W 84/04                   | (00) Assignment               | C10L 3/10                      |
| H04W 88/08                   | (71) Citryll B.V.             | (00) Assignment                |
| H04W 4/00                    | (73) Citryll B.V.             | (71) Apple Inc.                |
| (00) Assignment              | (11) EP3229829                | (73) Apple Inc.                |
| (71) Apple Inc.              | (00) 29.06.2021               | (11) EP2727435                 |
| (73) Apple Inc.              | (51) A61K 39/00               | (00) 28.06.2021                |
| (11) EP3032738               | A61P 29/00                    | (51) H04B 7/06                 |
| (00) 28.06.2021              | C07K 16/18                    | H04L 1/00                      |
| (51) H03F 1/02               | C07K 16/44                    | H04L 27/36                     |
| H03F 1/30                    | (00) Merge                    | H04W 52/02                     |
| H03F 1/56                    | (71) Apple Inc.               | H04W 52/14                     |
| H03F 3/195                   | (73) Apple Inc.               | H04W 52/24                     |
| H03F 3/24                    | (11) EP2742736                | H04W 52/32                     |
| H03H 7/40                    | (00) 28.06.2021               | H04W 72/12                     |
| H03H 11/30                   | (51) H04W 48/12               | (00) Assignment                |
| (00) Assignment              | (00) Assignment               | (71) Apple Inc.                |
| (71) Apple Inc.              | (71) Apple Inc.               | (73) Apple Inc.                |
| (73) Apple Inc.              | (73) Apple Inc.               | (11) EP3403443                 |
| (11) EP2936705               | (11) EP2543225                | (00) 28.06.2021                |
| (00) 28.06.2021              | (00) 28.06.2021               | (51) H04W 48/02                |
| (51) H04B 7/26               | (51) H04J 11/00               | H04W 88/02                     |
| H04L 1/18                    | H04W 74/08                    | H04W 88/08                     |
| (00) Assignment              | (00) Assignment               | (00) Assignment                |
| (71) Apple Inc.              | (71) Apple Inc.               | (71) Citryll B.V.              |
| (73) Apple Inc.              | (73) Apple Inc.               | (73) Citryll B.V.              |
| (11) EP3139698               | (11) EP3117658                | (11) EP2294086                 |
| (00) 28.06.2021              | (00) 28.06.2021               | (00) 29.06.2021                |
| (51) H04N 21/2343            | (51) H04W 84/12               | (51) A61K 39/00                |
| H04N 21/258                  | H04W 88/06                    | C07K 14/47                     |
| H04N 21/414                  | H04W 88/10                    | C07K 16/18                     |
| H04N 21/422                  | H04W 92/10                    | C07K 16/44                     |
| H04N 21/643                  | H04W 76/16                    | (00) Merge                     |
| H04N 21/658                  | H04W 76/22                    | (71) Citryll IP B.V.           |
| H04N 21/845                  | (00) Assignment               | (73) Citryll B.V.              |
| H04N 21/854                  | (71) Pharmacosmos Holding A/S | (11) EP2294086                 |
| H04L 29/06                   | (73) Pharmacosmos Holding A/S | (00) 29.06.2021                |
| H04L 29/08                   | (11) EP2934109                | (51) A61K 39/00                |
| H04W 4/06                    | (00) 29.06.2021               | C07K 14/47                     |
| H04W 8/00                    | (51) A01N 1/02                | C07K 16/18                     |
| H04W 36/22                   | (00) Assignment               | C07K 16/44                     |
| H04W 48/08                   | (71) HiberCell, Inc.          | (00) Demerger                  |
| H04W 48/10                   | (73) HiberCell, Inc.          | (71) KOBIL GmbH                |
| H04W 48/16                   | (11) EP3166616                | (73) KOBIL GmbH                |
| H04W 48/20                   | (00) 28.06.2021               | (11) EP2434424                 |
| H04W 74/00                   | (51) A61K 9/00                | (00) 01.07.2021                |
| H04W 84/12                   | A61K 31/715                   | (51) H04L 9/32                 |
| H04W 88/02                   | A61K 31/716                   | G06F 21/00                     |
| H04W 88/06                   | A61K 39/00                    | (00) Change of owner(s) name   |
| (00) Assignment              | A61K 39/395                   | (71) Ezisurg Medical Co., Ltd. |

Yisi Suzhou Medical Technology Co., Ltd.  
(73) Ezisurg Medical Co., Ltd.  
Yisi Suzhou Medical Technology Co., Ltd.  
(11) EP3222221  
(00) 22.06.2021  
(51) A61B 17/068  
A61B 17/072  
(00) Change of owner(s) name  
(71) Apple Inc.  
(73) Apple Inc.  
(11) EP3189693  
(00) 28.06.2021  
(51) H04W 48/12  
H04W 88/08  
H04W 4/70  
(00) Assignment  
(71) Indumax B.V.  
(73) Indumax B.V.  
(11) 2021004  
(00) 29.06.2021  
(51) B01D 53/04  
B01D 53/04  
B01J 20/04  
B01J 20/12  
B01J 20/16  
B01J 20/18  
B01J 20/20  
B01J 20/28  
B01J 20/30  
B01J 20/32  
C01B 32/372  
C01B 32/384  
(00) Assignment  
(71) Apple Inc.  
(73) Apple Inc.  
(11) EP3166234  
(00) 28.06.2021  
(51) H04L 5/00  
H04W 72/04  
H04W 76/14  
(00) Assignment  
(71) Apple Inc.  
(73) Apple Inc.  
(11) EP2868001  
(00) 28.06.2021  
(51) H04B 7/26  
H04W 24/10  
H04B 7/04  
(00) Assignment  
(71) Apple Inc.  
(73) Apple Inc.  
(11) EP3048841  
(00) 28.06.2021  
(51) H04J 11/00  
H04W 52/02  
(00) Assignment  
(71) SICK AG  
(73) SICK AG  
(11) EP3702850  
(00) 29.06.2021  
(51) G05B 17/02  
G05B 19/042  
(00) Assignment

**TVH**

**Topografieën van halfgeleiderproducten.  
Contains data concerning Semiconductors.**